



MATHEMATEG A RHIFEDD

**Cyflwyniad i sut yr ydym yn mynd ati i ddysgu
mathemateg a rhifedd**

Ysgol Betws Gwerful Goch ac Ysgol Bro Elwern



MATHEMATICS AND NUMERACY

**An Introduction to how we approach teaching
mathematics and numeracy**

Ysgol Betws Gwerful Goch ac Ysgol Bro Elwern

Mae'r llyfryn hwn yn esbonio sut mae mathemateg a rhifedd yn cael ei addysgu yn Ysgol Betws Gwerful Goch ac Ysgol Bro Elwern, gan sicrhau dilyniant, cysondeb ac iaith gyffredin ar draws y ffederasiwn.



This booklet explains how mathematics and numeracy is taught at Ysgol Betws Gwerful Goch and Ysgol Bro Elwern, ensuring progression, consistency, and a shared language across the federation.



Amserlen Dysgu Derbyn - Blwyddyn 2

Reception - Year 2 Timetable

Wythnos	1	2	3	4	5	6	7	8	9	10	11	12
Hydref	Gwerth Lle				Adio a Thynnu					Siâp		
	Cyfrifo Darllen, ysgrifennu a threfnu rhifau Llenwi bylchau	Cymharu q G = Trefnu Rhifau Eilrifau ac Odrifau	CDU Cynrychioli Dosrannu	Cyfrif ymlaen ac yn ôl (bob yn 1, 2, 5 a 10) Llinell rif Dilyniannau rhif Amcangyfrif	1/10 yn fwy a 1/10 yn llai	Bondiau rhif	Rhan/Cyfan Gwahaniaeth Gwrthdro teuluoedd rhifau	Adio Adio colofnau	Tynnu Tynnu colofnau	Siapiau 2D	Siapiau 3D	Cymesuredd Patrwm
Gwanwyn	Arian		Lluosi a Rhannu				Hyd ac Uchder		Mâs, Cynhwysedd a Thymheredd			
	Adnabod dar- nau arian Cyfrifo Arian	Cyfrifo newid Defnyddio yn ymarferol i dalu	Tablau 2, 5 a 10 Cyfri fesul 2, 5 a 10 Ail-adrodd adio	Dyblau/dyblau agos Lluosi gyda 2 Dyblu rhifau 2 ddigid	Haneru Rhannu gyda 2 Haneru rhifau 2 ddigid	Lluosi Areau	Rhannu Gwrthdro llusi a rhannu	Cymharu hyd ac uchder	Mesur hyd	Mâs	Cynhwysedd	Tymheredd
Haf	Ffracsiynau			Amser		Ystadegau		Safle a Chyfeiriad		Atgyfnerthu		
	Adanbod ffracsiynau yn ymarferol ac ysgrifennu symbol Rhannau a cyfan	Darganfod ffracsiynau siapiau 2D	Ffracsiynau o rif	Dyddiau, misoedd ayyb Trefnu diwrnod Amseru	Darllen amser ar gloc analog	Darllen amser ar gloc digidol	Didoli - diagramau didoli	Casglu data Creu graffiau Darllen a dehongli data	Trefnolion Troeon ac Onglau	Safle, geirfa a chwmpawd Cyfesurynnau		

Amserlen Dysgu Blwyddyn 3 a 4/ Year 3 and 4 Timetable

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Hydref/ Autumn	Gwerth LLe/ Place Value				Adio a Tynnu/ Addition and Subtraction				Lluosi a Rhannu/ Multiply and Divide			Arwynebedd/ Area			
Gwanwyn/ Spring	Lluosi a Rhannu B Multiply and Divide				Hyd a Pherimedr/ Length and perimetr			Ffracsiynau A/ Fractions			Mas a Chynwysedd Mas and capacity		Ffracsiynau B/ Fractions B		
Haf/ Summer	Degolion/ Decimals				Arian/ Money			Siap/ Shape		Cyfeiriad/ Direction			Siap B/ Shape B		

Amserlen Dysgu Blwyddyn 5 a 6/ Year 5 and 6 Timetable

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Hydref/ Autumn	Gwerth LLe/ Place Value			Adio a Tynnu/ Addition and Subtraction	Lluosi a Rhannu/ Multiply and Divide		Ffracsiynau/ Fractions			Lluosi a Rhannu / Multiply and Divide		Amser/ Time		
Gwanwyn/ Spring	Ffracsiynau/ Fractions			Degolion/ Decimals			Arwynebedd, perimedr a chyfaint/ Area, perimetr and volume			Degolion/ Decimals		Ffracsiynau, degolion a chanrannau/ Fractions, decimals and percentages		
Haf/ Summer	Arian/ Money		Cymhareb/ Ratio		Algebra/ Algebra		Siap/ Shape			Safle a Chyfeiriad/ Position and Direction			Ystadegau/ Statistics	



Camau Dysgu/ Learning Steps

- Cyflwyno'r sgil / Introduce the skill
- Ymarfer y sgil / Practise the skill
- Ymresymu / Reasoning
- Atgyfnerthu'r sgil ar draws y meysydd dysgu eraill / Reinforce the skill across the other areas of learning

Rhoddir cyfleoedd rheolaidd i ddysgwyr ymarfer, ymresymu, defnyddio sgiliau mewn sefyllfaoedd bywyd go iawn a datrys problemau.

Learners are given regular opportunities to practise, reason, apply skills to real-life contexts, and solve problems through discussion, games, and written work.



Cyflwyno

- Cyflwyno'r sgil i'r dysgwyr. Darganfod gwybodaeth blaenorol.

Ymarfer

- Rhoi'r cyfle i blant ymarfer y sgil. Gall hwn fod mewn parau, ar fyrddau gwyn, yn y llyfr, drwy weithgaredd ayb

Ymresymu

- Rhoi problem neu gwestiwn iddynt defnyddio'r sgil i ddatrys y broblem.

Trawsgwricwlaidd

- Cysylltu'r sgil a'i throsglwyddo i gyd-destun gwahanol. Atgyfnerthu'r sgiliau mewn bywyd go iawn.



Introduce

- Introduce the skill to learners. Recall previous learning.

Practice

- Give children the opportunity to practice the skill. This can be in pairs, on whiteboards, in the book, through activities, etc.

Reasoning

- Give them a problem or question to use the skill to solve the problem.

Cross- Curricular

- Connect the skill and transfer it to a different context. Reinforce the skills in real-life situations.

Darpariaeth/ Provision



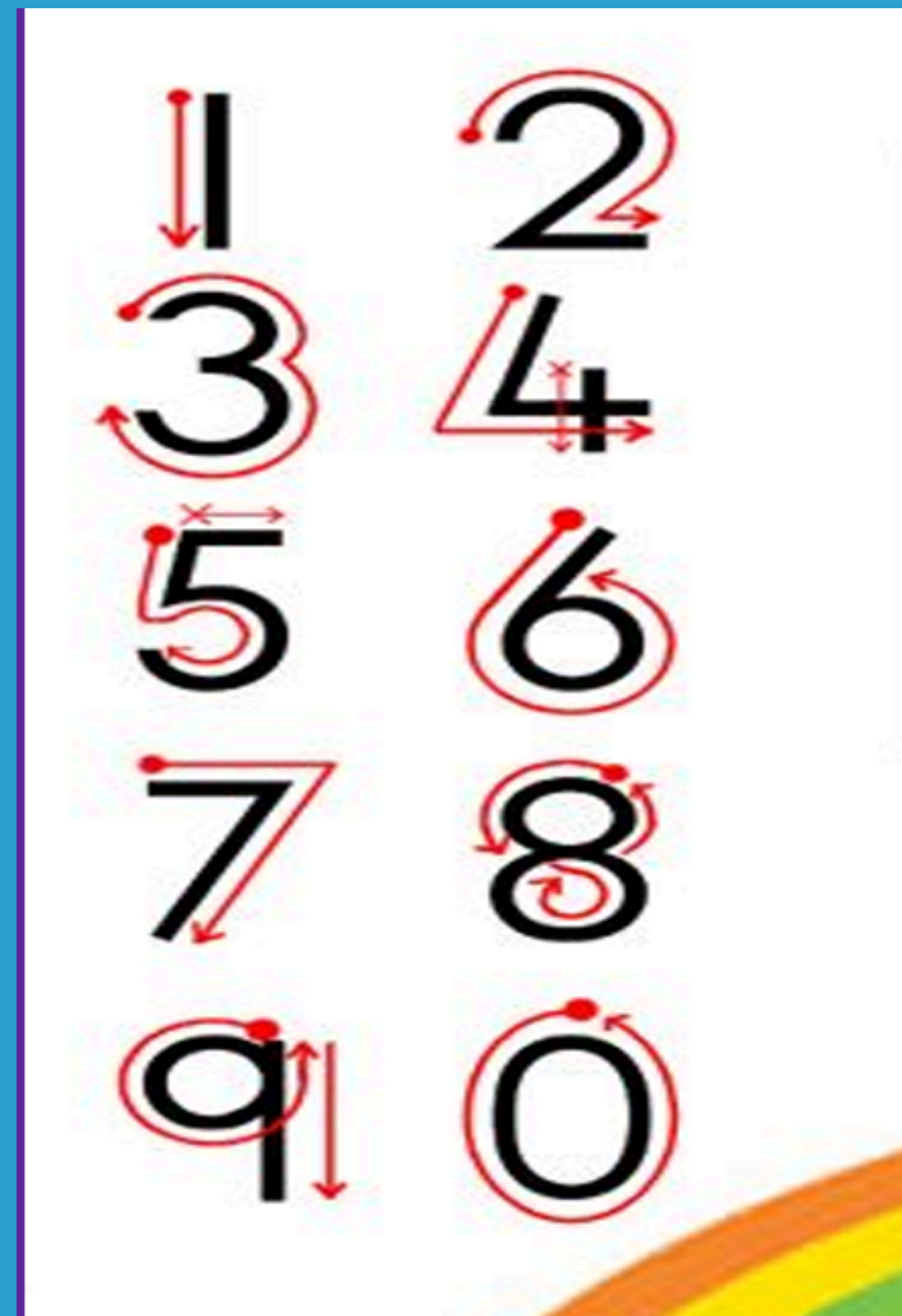
x	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144



Ffurio Rhifau/ Number Formation

Mae'n holl bwysig cael cysondeb wrth ffurfio rhifau. Wrth gychwyn ffurfio rhifau yn y Meithrin a'r Derbyn rydym yn defnyddio'r drefn hyn gan gychwyn ar y smotyn bob amser.

It's important to have a consistent approach to number formation. In the Nursery and Reception when we start learning how to form numbers we follow this formation, always starting on the red spot




Y 4 Rheol/ The 4 Rules



Mae'r pedwar rheol yn elfennau sylfaenol ar daith dysgu rhifedd.

The four rules are the foundational elements in the numeracy journey.



Geirfa/ Terminology Meithrin/ Derbyn

Tynnu/ Subtract

Un yn fwy/ One more

Rhannu/ Divide

Lluosi/ Multiply

Un yn llai/ One less

Yn hafal i/ Equal to

Adio/ Add



Geirfa/ Terminology

Bl/ Yrs 1 a 2

Tynnu/ Subtract

Un yn fwy/ One more

Cyfanwsm/ Total

Lluosi/ Multiply

Rhannu/ Divide

Un yn llai/ One less

Dwbl/ Double

O'r gloch/ O'clock

Yn hafal i/ Equal to

Adio/ Add

Geirfa/ Terminology

Bl/ Yrs 3 a 4

Tynnu/ Subtract

Un yn fwy/ One more

Cyfanwsm/ Total

Lluosi/ Multiply

yn fwy/ yn llai/ more/less

Rhannu/ Divide

Gwahaniaeth/ Difference

Adio/ Add

Geirfa/ Terminology

Bl/ Yrs 5 a 6

Tynnu/ Subtract

Cyfanwsm/ Total

Rhannu/ Divide

Cyfartaledd/ Average

Canolrif/ Median

Amrediad/ Range

Lluosi/ Multiply

Modd/ Mode

Adio/ Add

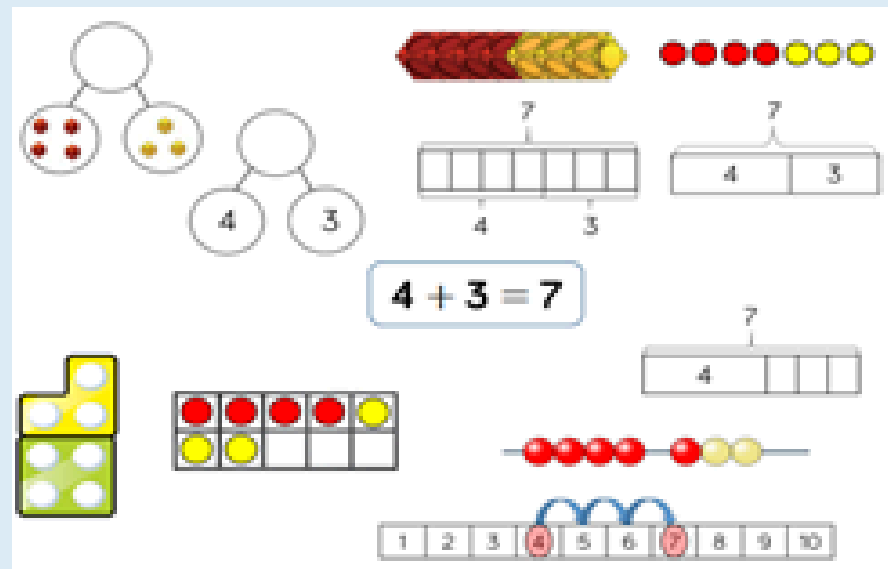
Sgwario/ squared

Ail-isradd/

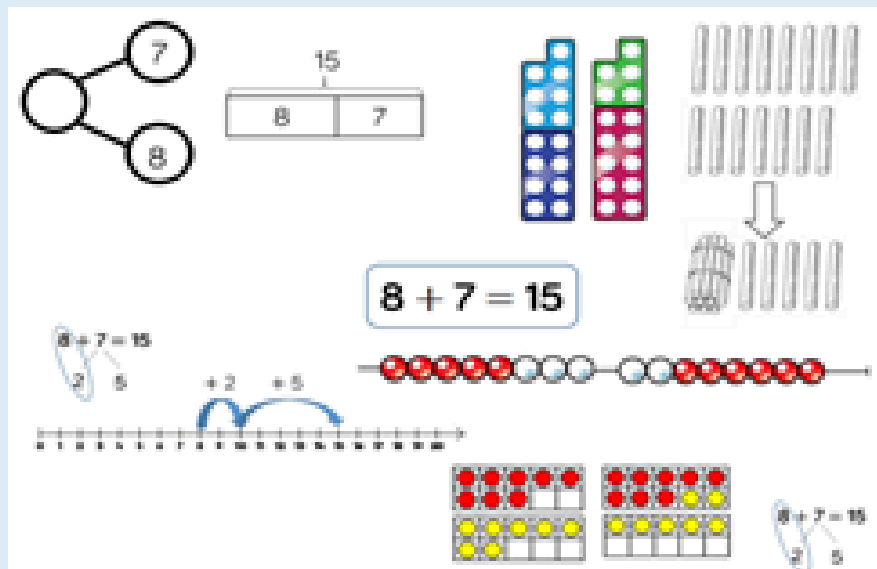
Adio / Additton



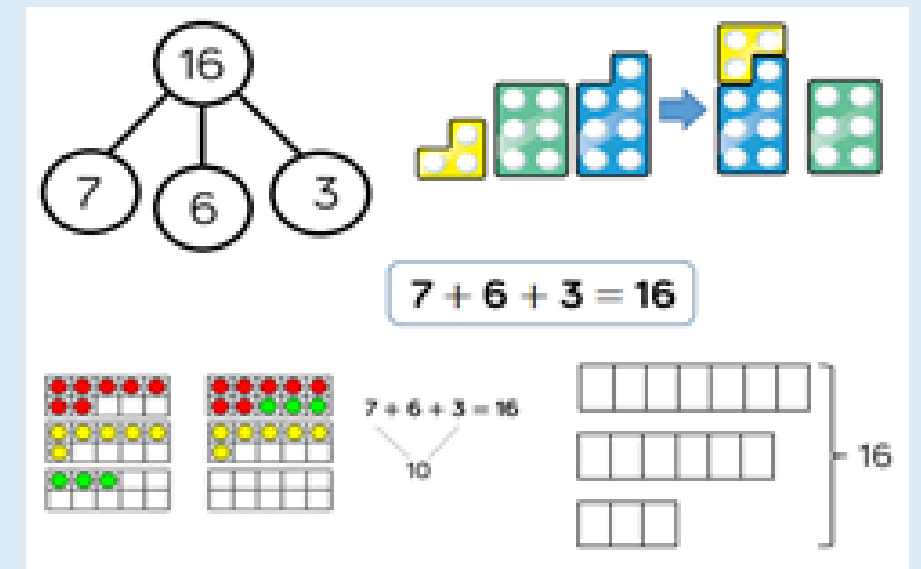
Sgyl - adio rhifau 1 digid o fewn 10



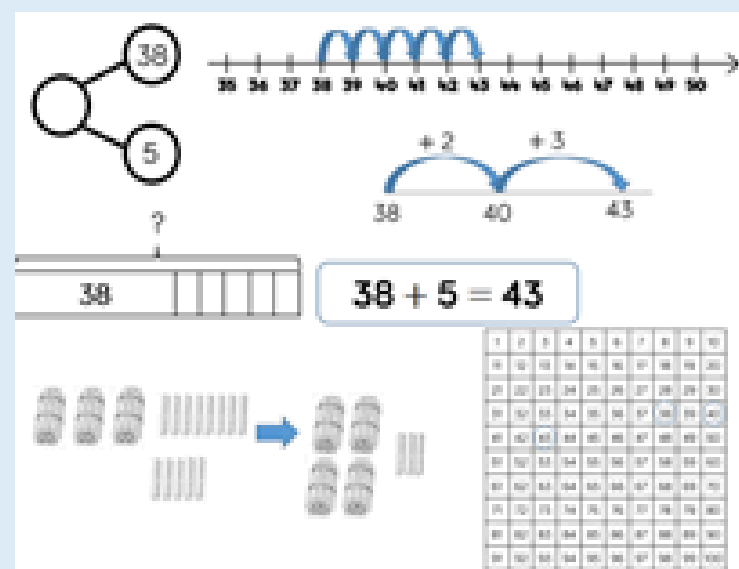
Sgyl - adio rhifau 1 a 2 ddigid at 20



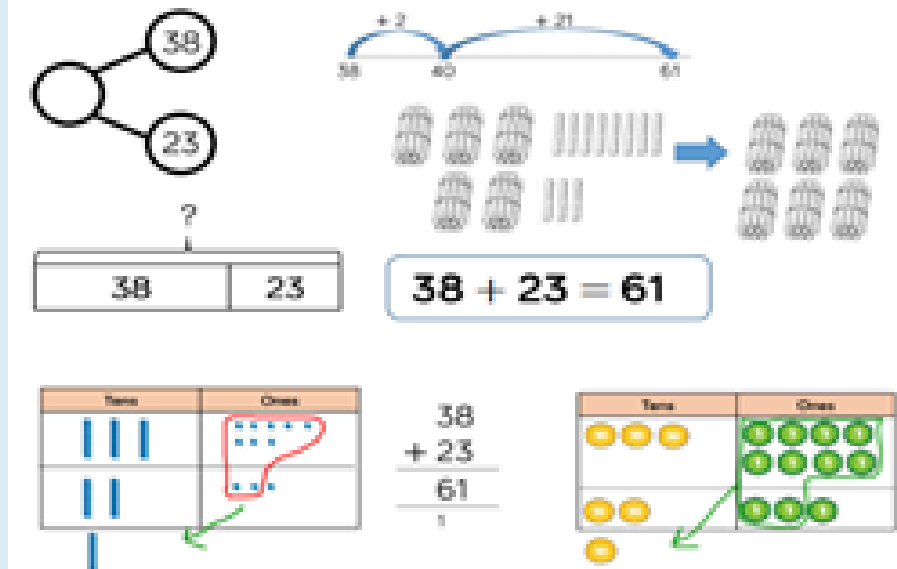
Adio tri rhif 1 digid



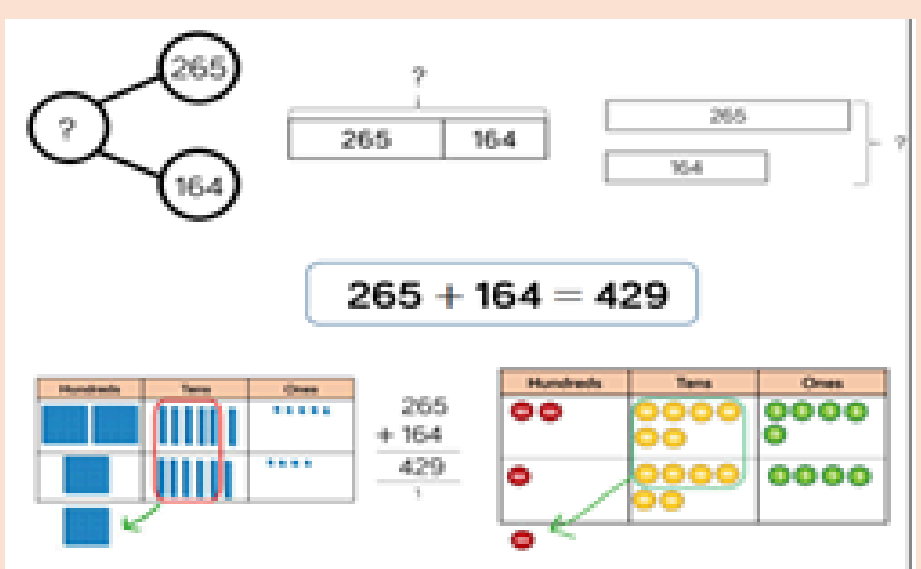
Sgyl - adio rhifau 1 a 2 digid o fewn 100



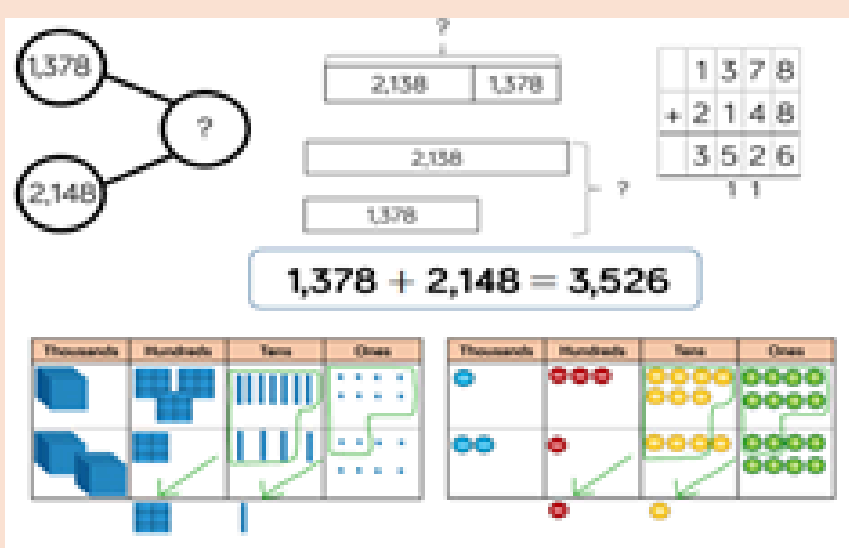
Sgyl - adio dau rhif 2 digid o fewn 10



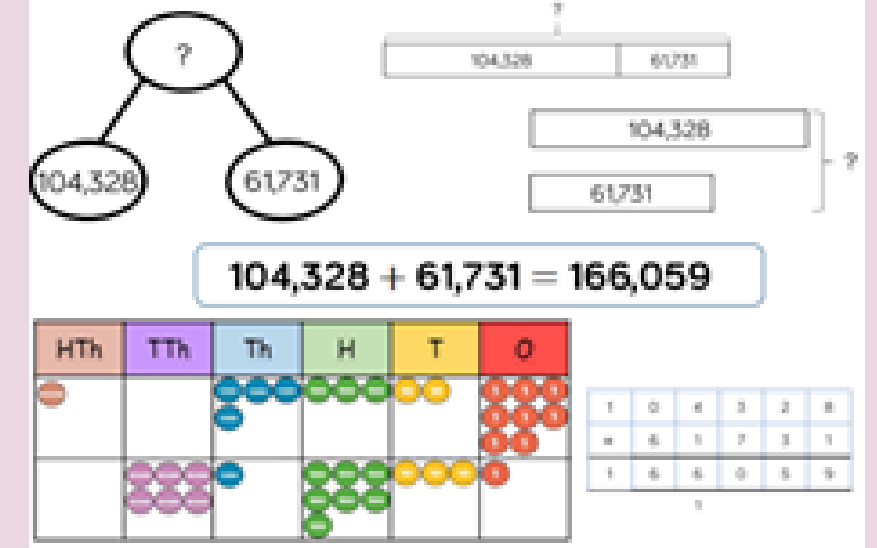
Sgyl - adio rhifau gyda hyd at 3 digid



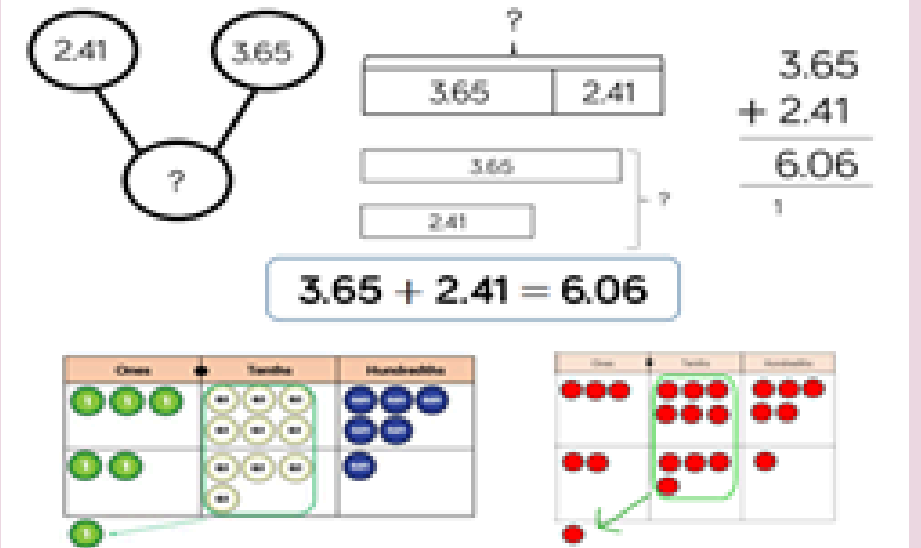
Sgyl - adio rhifau gyda hyd at 4 digid



Sgyl - adio rhifau gyda mwy na 4 digid



Sgyl - adio gyda hyd at 3 pwynt degol





Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Adio dau rhif 1 digid tuag at 10	1	Model rhan-gyfan Model bar Siapiau rhif	Llinyn gleiniau (10) Traciau rhif Fframiau deg (o fewn 10)
Adio rhifau 1 a 2 digid tuag at 20	1	Model rhan-gyfan Model bar Siapiau rhif Llinellau rhif (wedi labelu)	Llinyn gleiniau (20) Traciau rhif Fframiau deg (o fewn 20) Gwellt
Adio 3 rhif 1 digid	2	Model rhan-gyfan Fframiau deg (o fewn 20)	Model bar Siapiau rhif
Adio rhifau 1 a 2 digid at 100	2	Model rhan-gyfan Llinellau rhif (wedi labelu) Gwellt	Model bar Llinellau rhif (gwag) Sgwar 100



Skill	Year	Representations and models	
Add two 1-digit numbers to 10	1	Part-whole model Bar model Number shapes	Ten frames (within 10) Bead strings (10) Number tracks
Add 1 and 2-digit numbers to 20	1	Part-whole model Bar model Number shapes Ten frames (within 20)	Bead strings (20) Number tracks Number lines (labelled) Straws
Add three 1-digit numbers	2	Part-whole model Bar model	Ten frames (within 20) Number shapes
Add 1 and 2-digit numbers to 100	2	Part-whole model Bar model Number lines (labelled)	Number lines (blank) Straws Hundred square



Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Adio dau rhif 2 ddigid	2	Model rhan-gyfan Model bar Llinellau rhif (wedi labelu) Adio colofnau	Bas 10 Cownteri gwerth lle Gwellt
Adio gyda hyd at 3 digid	3	Model rhan-gyfan Model bar Adio colofnau	Bas 10 Cownteri gwerth lle
Adio gyda hyd at 4 digid	4	Model rhan-gyfan Model bar Adio colofnau	Bas 10 Cownteri gwerth lle
Adio gyda dros 4 digid	5	Model rhan-gyfan Model bar	Adio colofnau Cownteri gwerth lle
Adio gyda hyd at 3 pwynt degol	5	Model rhan-gyfan Model bar	Adio colofnau Cownteri gwerth lle



Skill	Year	Representations and models	
Add two 2-digit numbers	2	Part-whole model Bar model Number lines (blank) Straws	Base 10 Place value counters Column addition
Add with up to 3-digits	3	Part-whole model Bar model	Base 10 Place value counters Column addition
Add with up to 4-digits	4	Part-whole model Bar model	Base 10 Place value counters Column addition
Add with more than 4 digits	5	Part-whole model Bar model	Place value counters Column addition
Add with up to 3 decimal places	5	Part-whole model Bar model	Place value counters Column addition

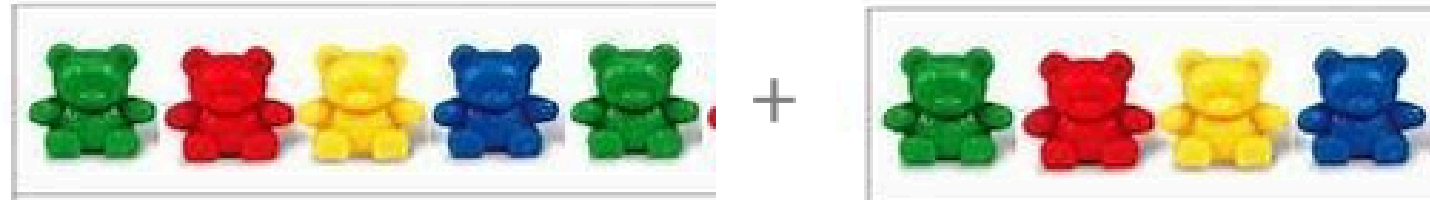
1 digid + 1 digid

$$5 + 4 = 9$$

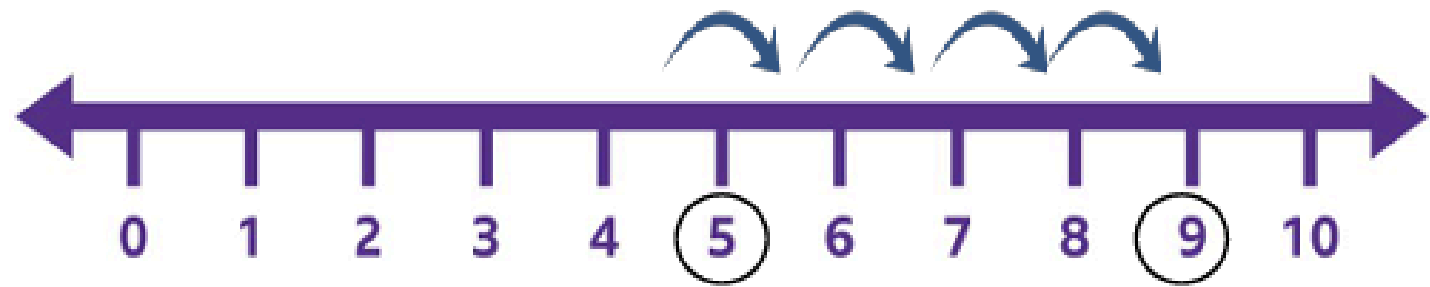
“Pump adio pedwar yn hafal i naw”

Sgwar 100
Cyfrif ymlaen

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

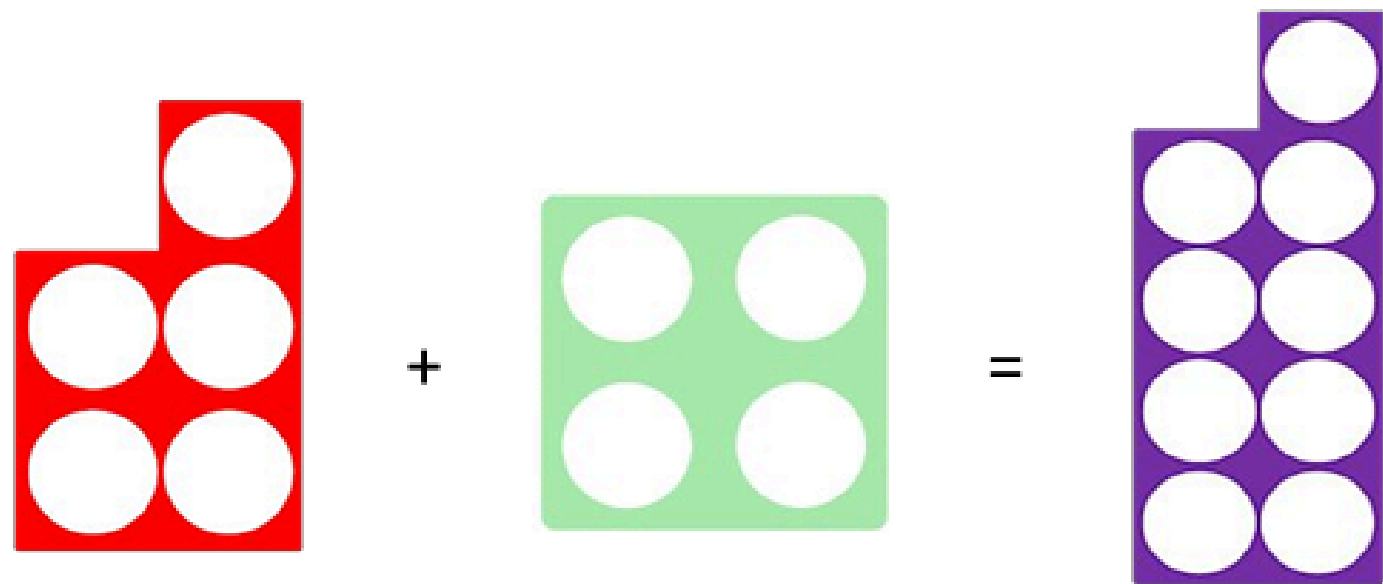


Cyfrif y nifer cywir o wrthrychau.
Adio'r gwrthrychau at ei gilydd.



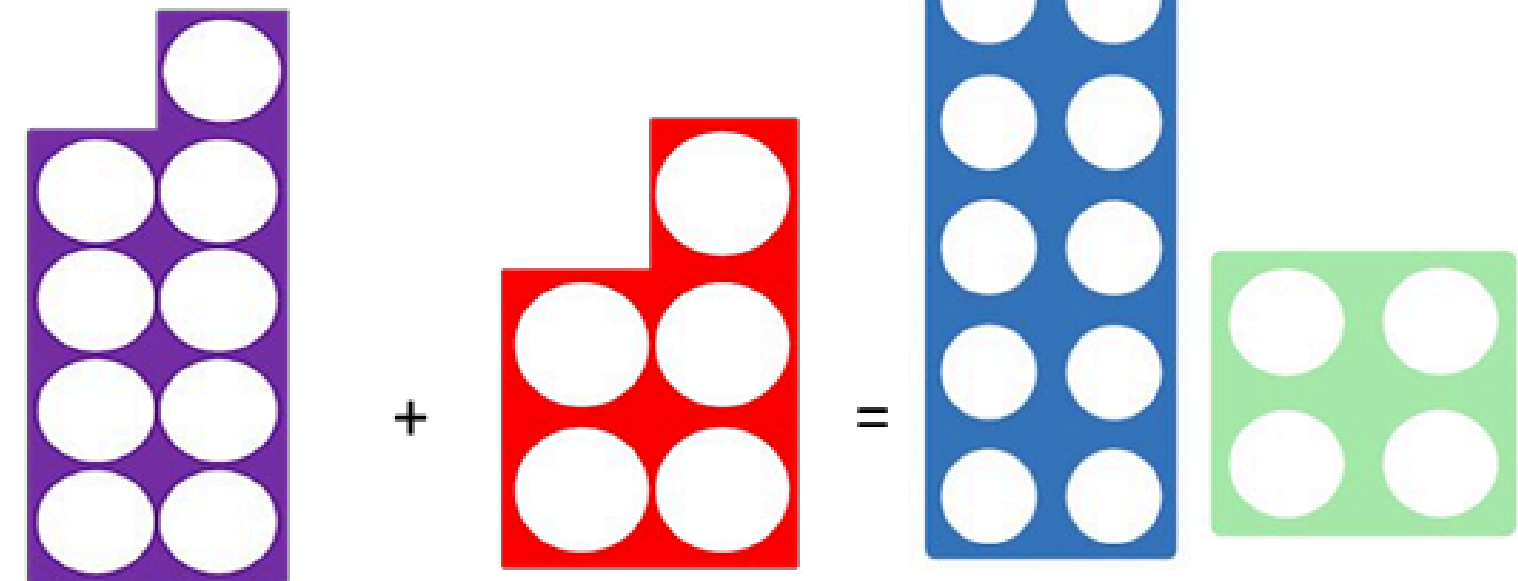
Llinell rif -
cyfrif ymlaen

$$9 + 5 = 14$$



Datblygiad

Dewis y numicon cywir, adio'r ddau numicon i ddod o hyd i'r ateb.

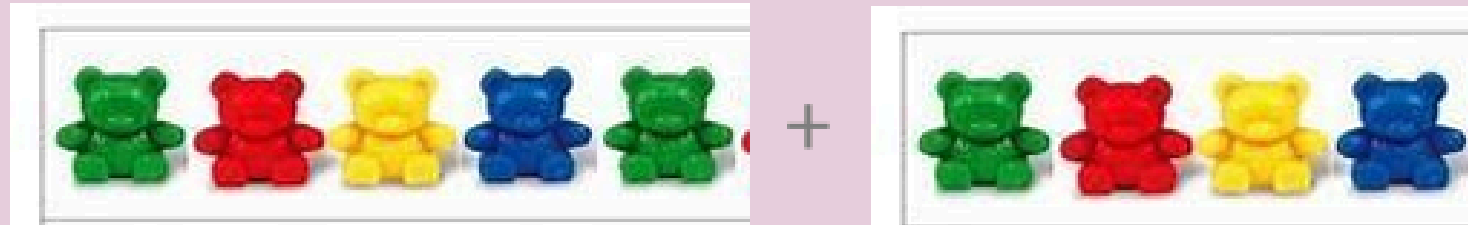


1 digit + 1 digit

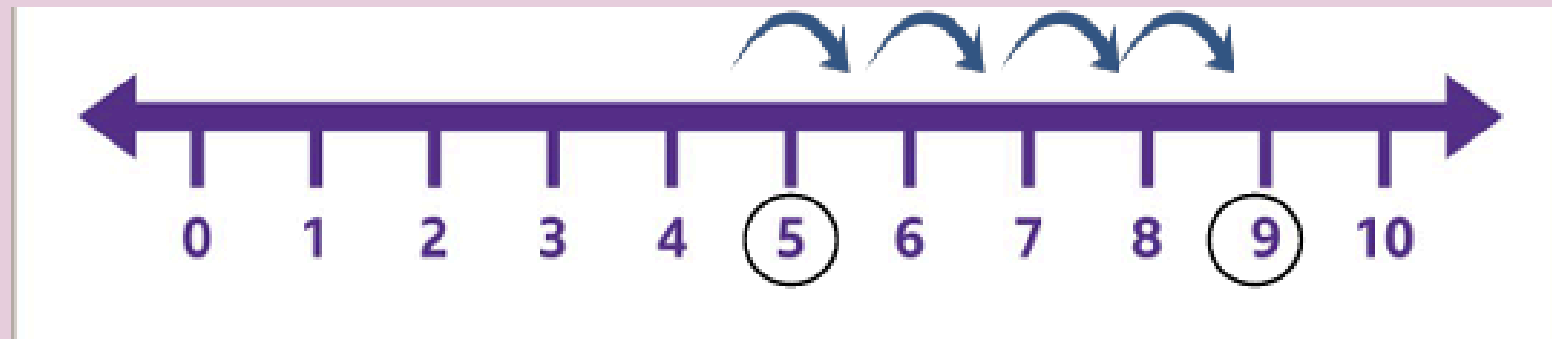
100 square
Count forward

"Five add 4 equals to 9"

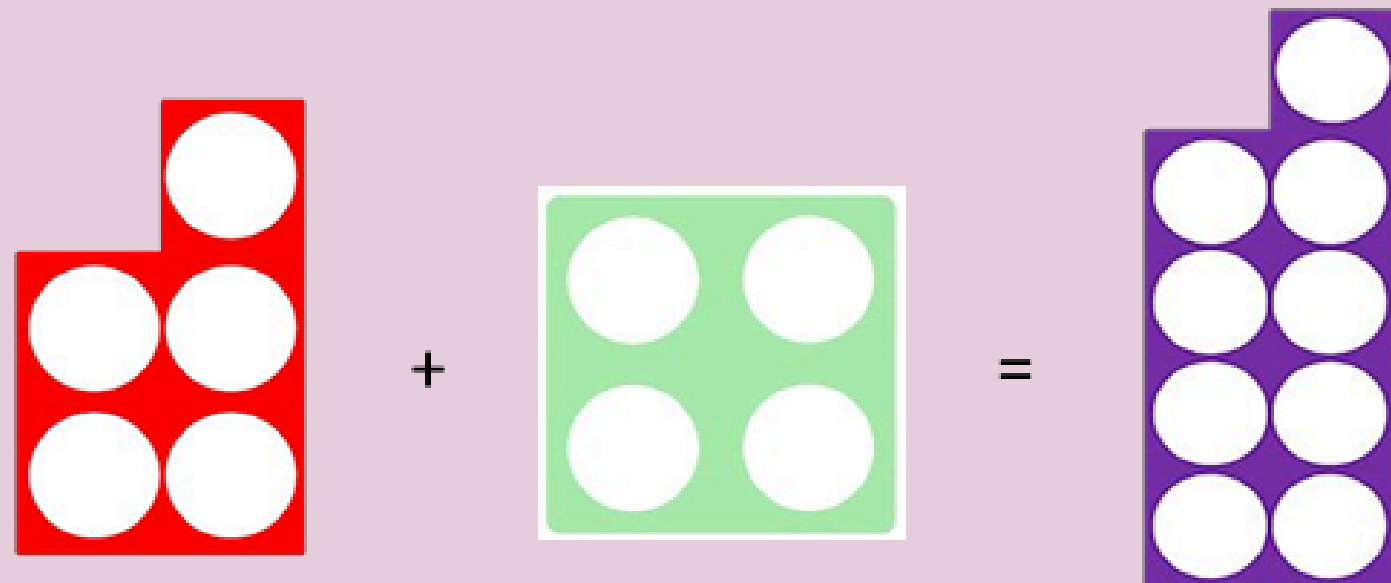
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Count the objects
Add them
together



Number line -
count forwards



Progression

Choose correct
numicon plates,
add together

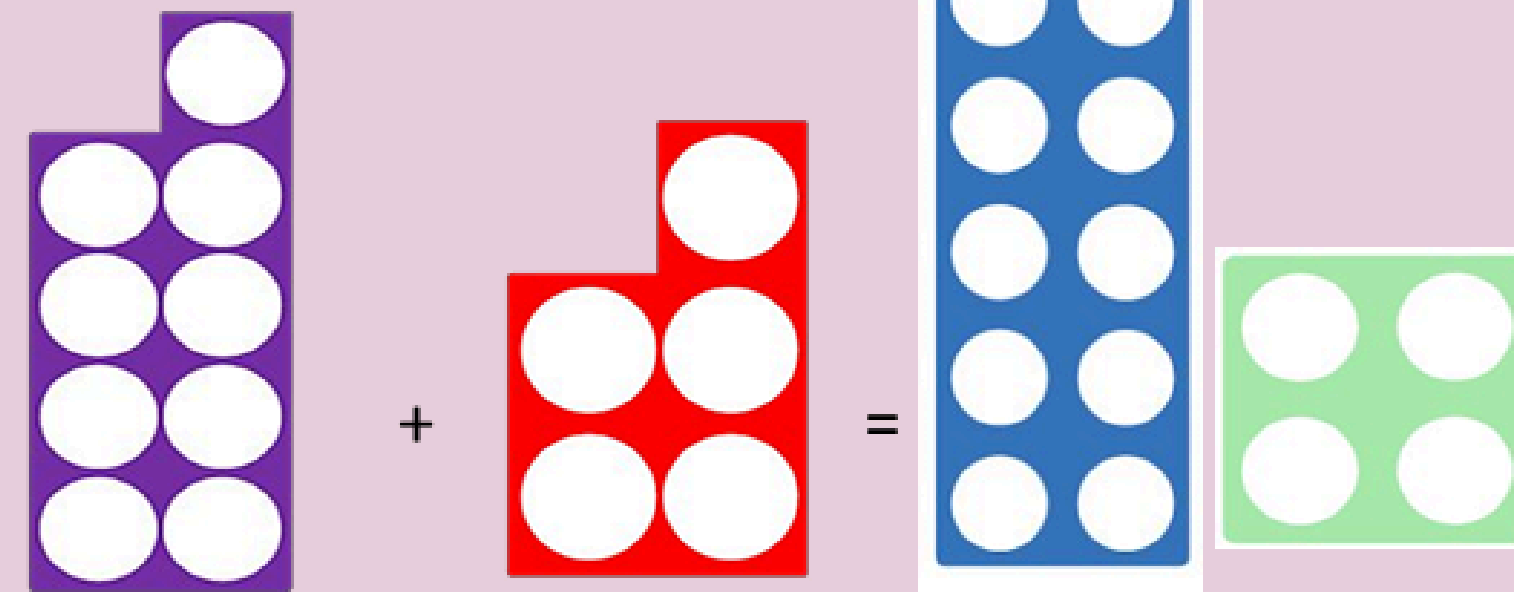
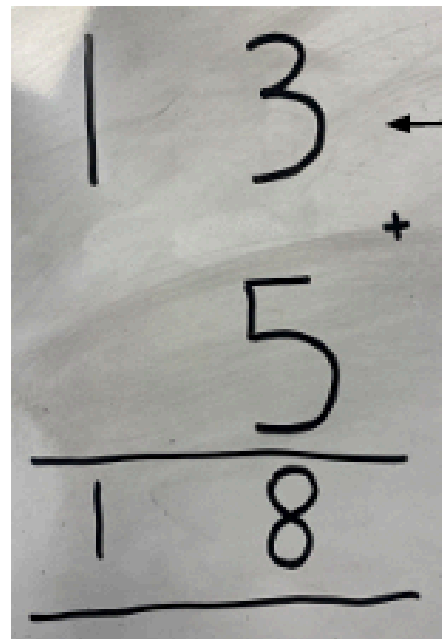




Diagram illustrating the addition of 4 and 3 to equal 7 using various visual models:

- Top Left:** A tree diagram with an empty top circle and two bottom circles. The left bottom circle contains 4 red beads, and the right bottom circle contains 3 yellow beads.
- Top Middle:** A tree diagram with an empty top circle and two bottom circles labeled 4 and 3.
- Top Right:** A row of 7 beads: 4 red beads followed by 3 yellow beads.
- Middle Left:** A ten-frame with 7 boxes filled: 4 red beads in the first four boxes and 3 yellow beads in the last three boxes.
- Middle Center:** A rounded rectangle containing the equation $4 + 3 = 7$.
- Middle Right:** A ten-frame with 7 boxes filled: 4 red beads in the first four boxes and 3 yellow beads in the last three boxes.
- Bottom Left:** A vertical stack of 7 blocks: 4 yellow blocks on top and 3 green blocks on the bottom.
- Bottom Center:** A ten-frame with 7 boxes filled: 4 red beads in the first four boxes and 3 yellow beads in the last three boxes.
- Bottom Right:** A ten-frame with 7 boxes filled: 4 red beads in the first four boxes and 3 yellow beads in the last three boxes.
- Bottom Far Right:** A ten-frame with 10 boxes numbered 1 to 10. The 4th and 7th boxes are shaded pink. Blue curved arrows point from the 4th box to the 5th, 5th to the 6th, and 6th to the 7th box.

2 digid + 1 digid



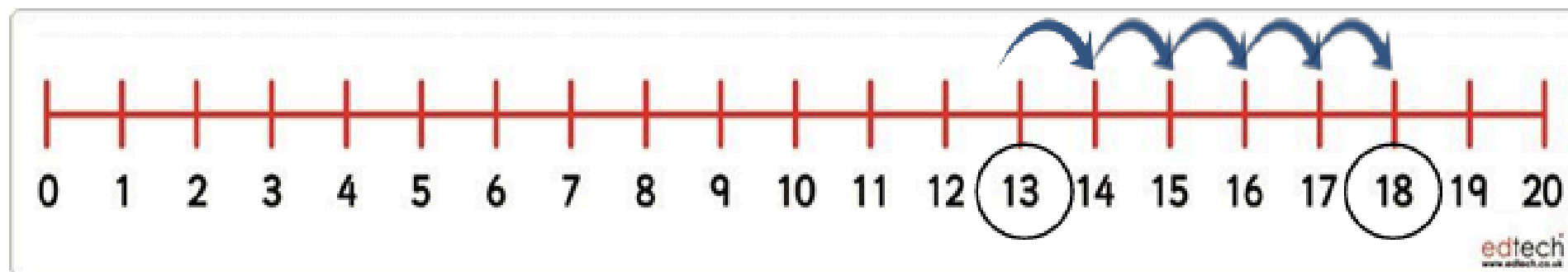
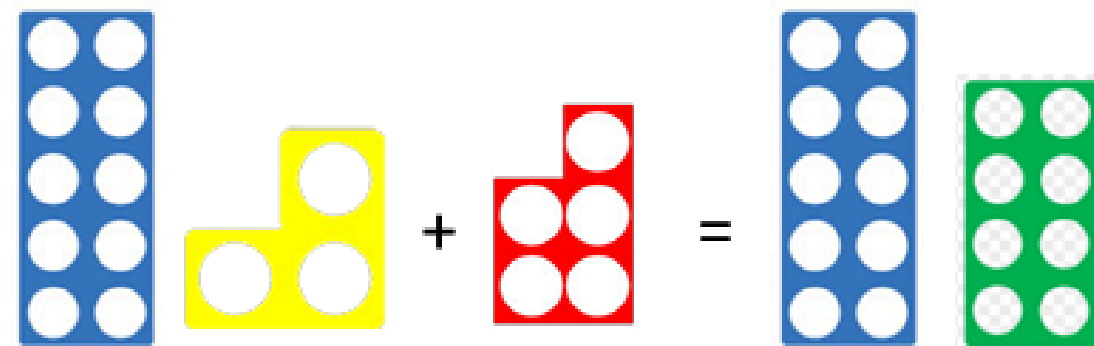
Dechrau o'r dde

Adio ar i'w lawr

Ateb rhwng y llinellau

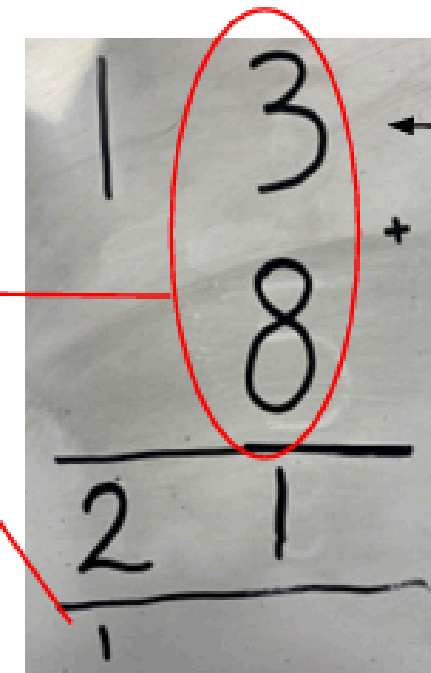
Symud i'r chwith

Datblygiad



Os yw'r 2 rhif yn adio i wneud mwy nag 10 mae'r degau yn mynd o dan y degau yn symud i'r chwith

Adio y degau i'r rhifau sydd yn y golofn yno



Dechrau o'r dde

Adio ar i'w lawr

Ateb rhwng y llinellau

Symud i'r chwith

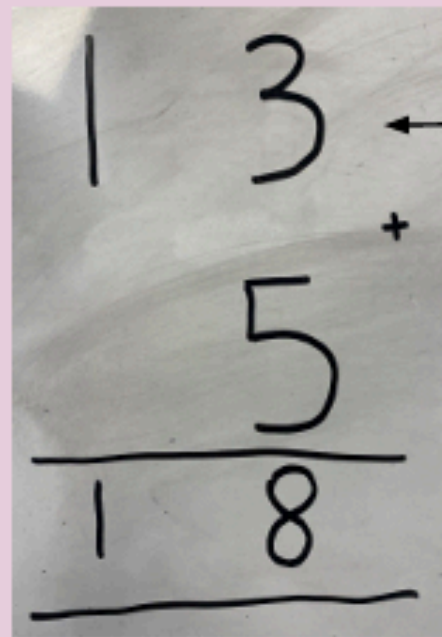
$$8 + 13 = 21$$

Adio'r degau

Cyfrif ymlaen (adio'r unedau)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

2 digit + 1 digit



Start on right

Add downwards

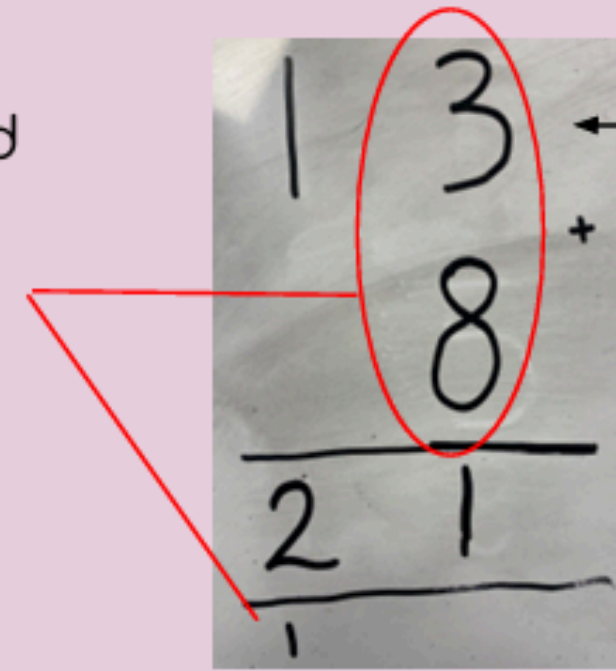
Answer between lines

Move to left



If 2 numbers add to more than 10 the tens go below the tens moving to the left.

Add the tens to the numbers in that column

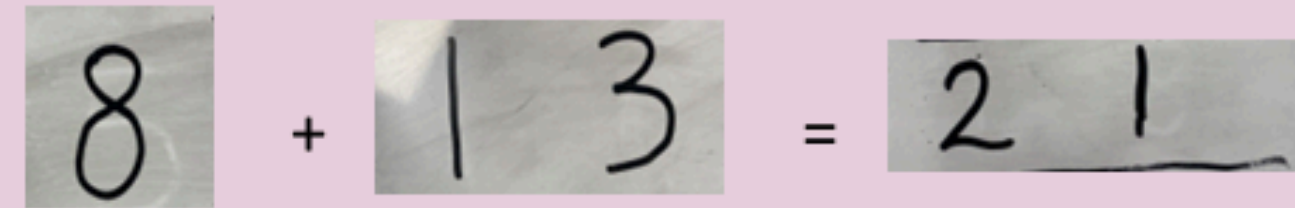
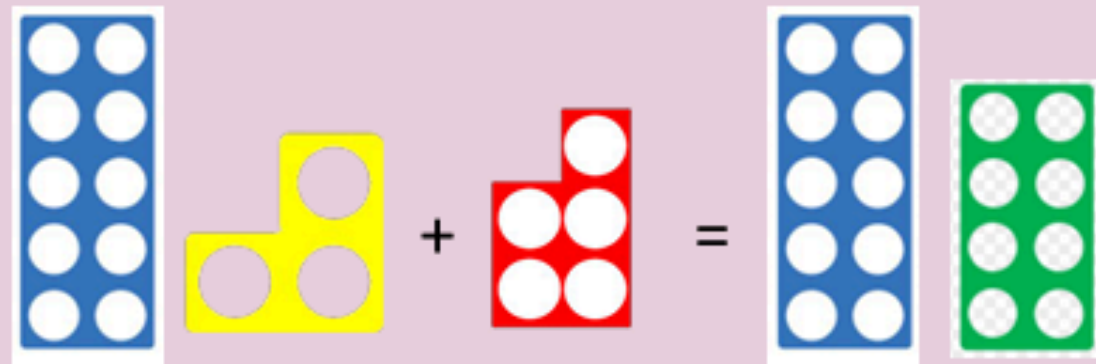


Start on right

Add downwards

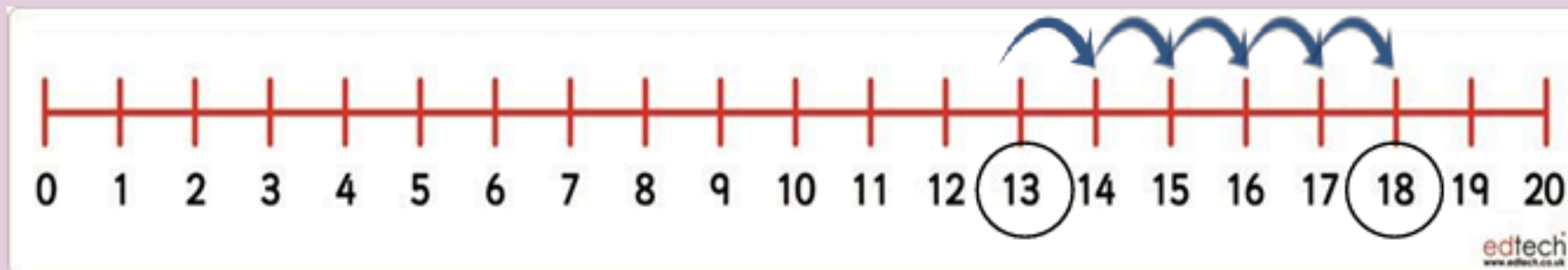
Answer between lines

Move to left

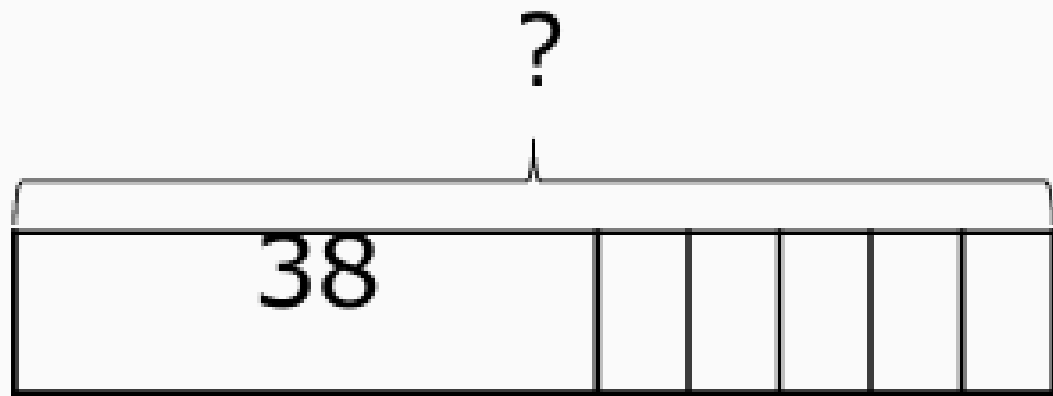
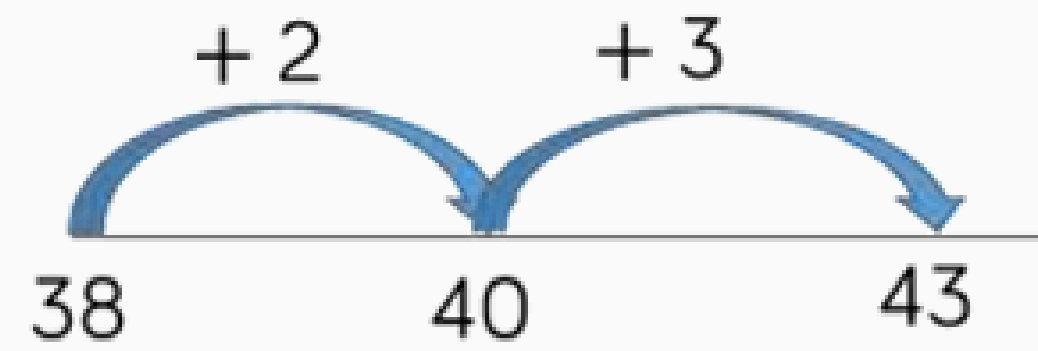
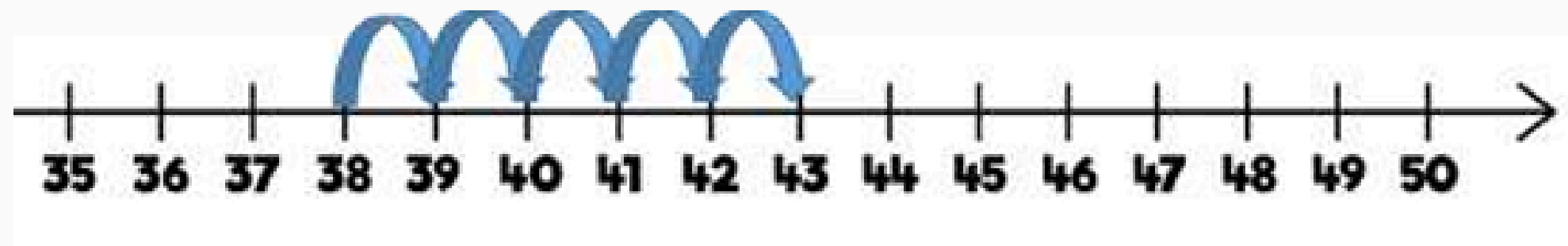
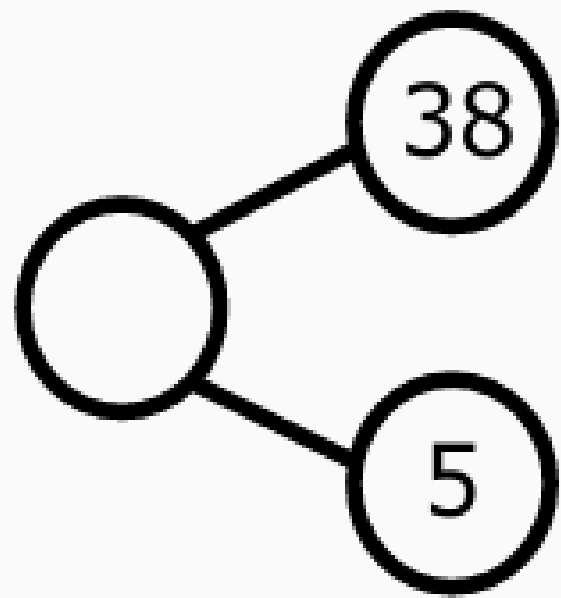


Add tens

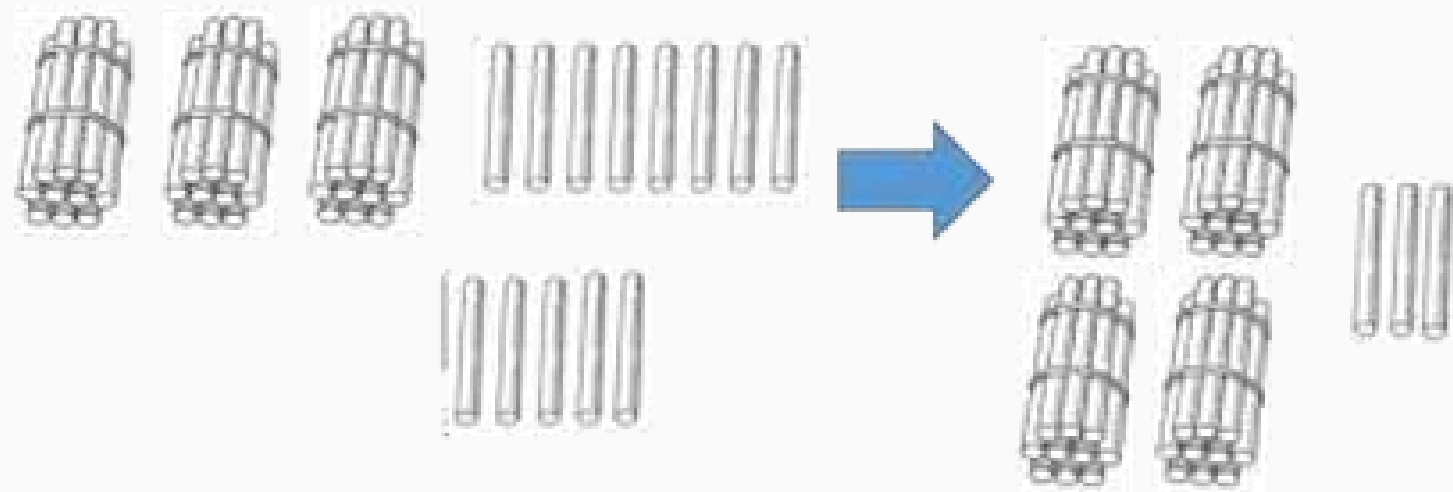
Count forwards (add units)



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

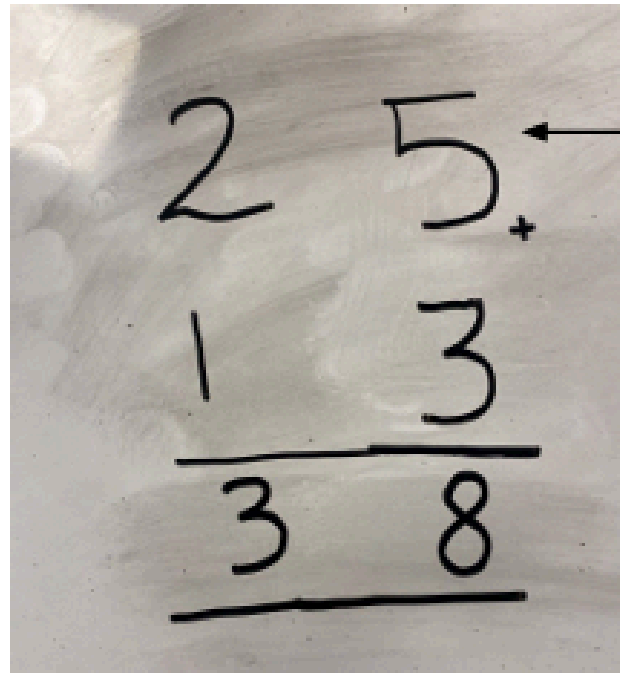


$$38 + 5 = 43$$



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

2 digid + 2 digid



Dechrau o'r dde

Adio ar i lawr

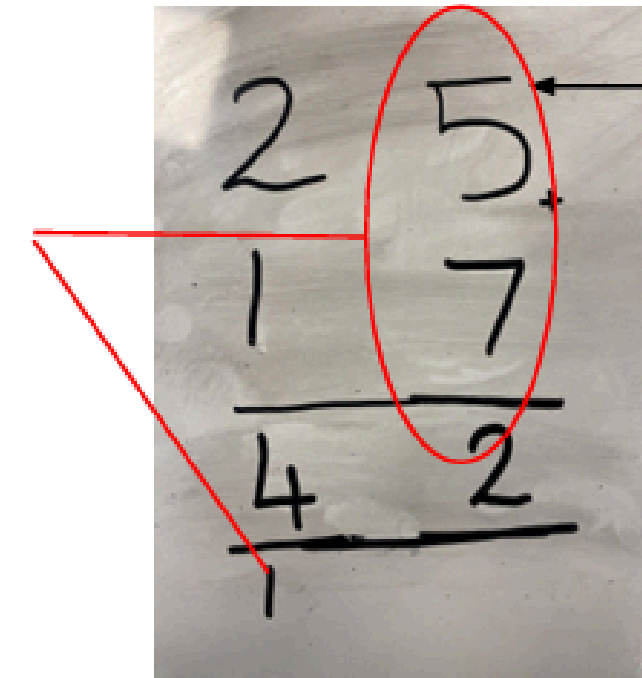
Ateb rhwng y llinellau

Symud i'r chwith



Os yw'r 2 rif yn adio i wneud mwy na 10 mae'r unedau yn mynd o danodd a'r degau yn symud i'r chwith

Adio y degau i'r rhifau sydd yn y golofn yno



Dechrau o'r dde

Adio ar i'w lawr

Ateb rhwng y llinellau

Symud i'r chwith

Adio'r degau

Cyfrif ymlaen (adio'r unedau)

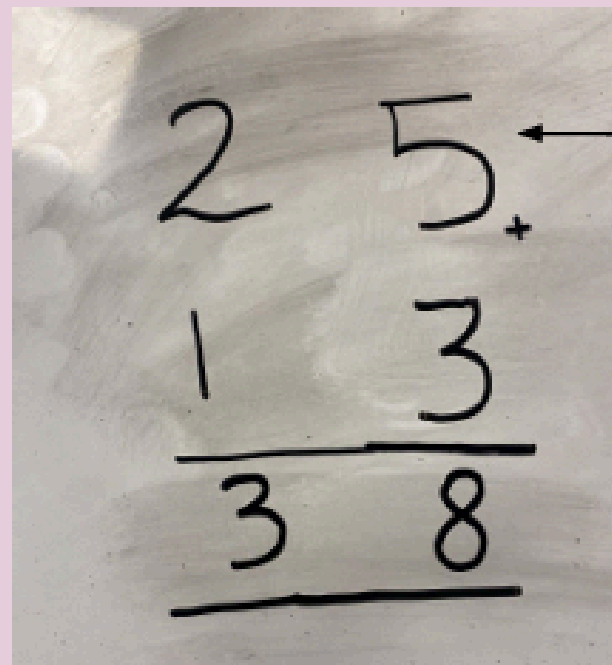
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Adio'r degau

Cyfrif ymlaen (adio'r unedau)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

2 digit + 2 digit



Start on right

Add downwards

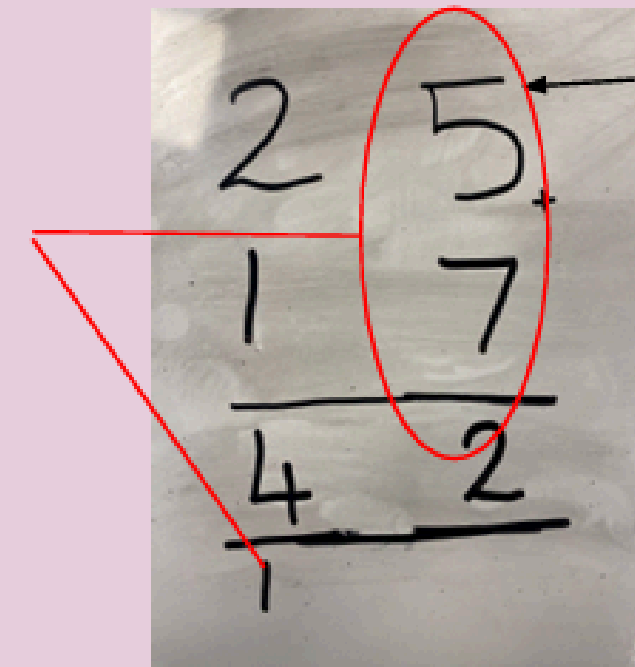
Answer between lines

Move to left



If the 2 numbers add to more than 10 the units go under and the tens move to the left.

Add the tens to the numbers in that column



Start on right

Add downwards

Answer between lines

Move to left

Add tens

Count forwards (add the units)

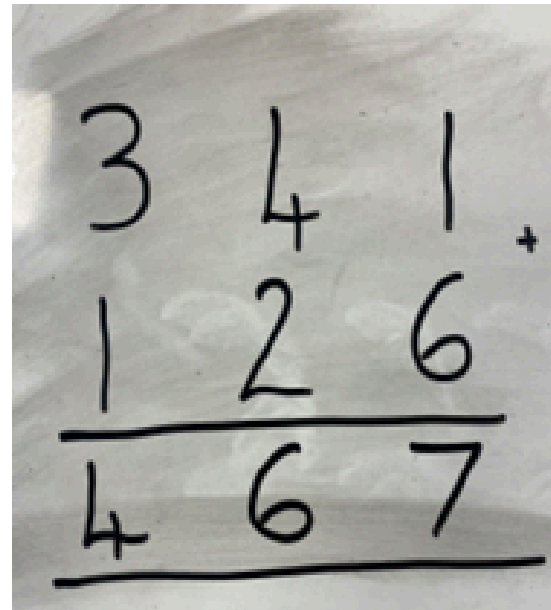
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Add tens

Count forwards (add the units)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

3 digid + 3 digid



Dechrau o'r dde

Adio ar i lawr

Ateb rhwng y llinellau

Symud i'r chwith



Os yw'r 2 rhif yn adio i wneud mwy nag 10 mae'r unedau yn mynd o danodd a'r degau yn symud i'r chwith

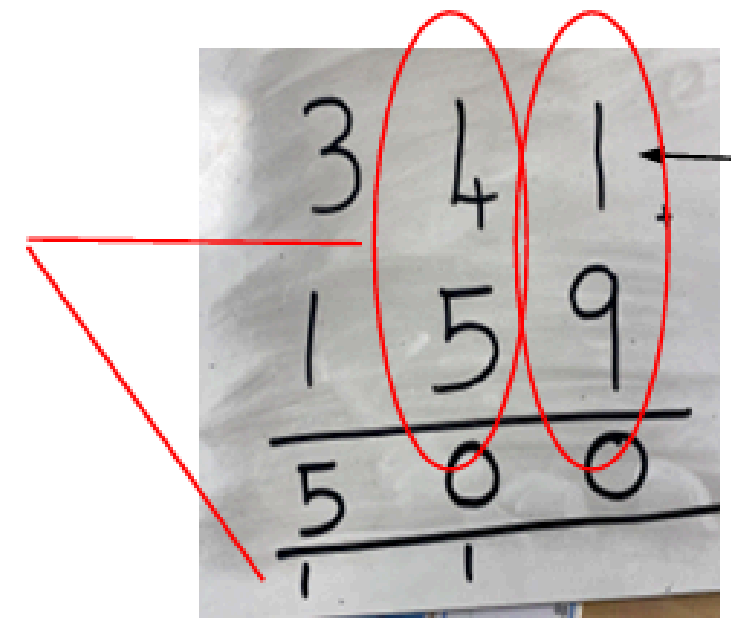
Adio y degau i'r rhifau sydd yn y colofn yno

Parhau i wneud hyn Os mae'r colofn nesaf hefyd yn fwy nag 10

Adio'r degau i'r rhifau sydd yn y colofn yno

Parhau i wneud hyn Os mae'r colofn nesaf hefyd yn fwy nag 10

Os nad oes rhif arall yn y golofn gwthiwch y rhif o dan i fyny

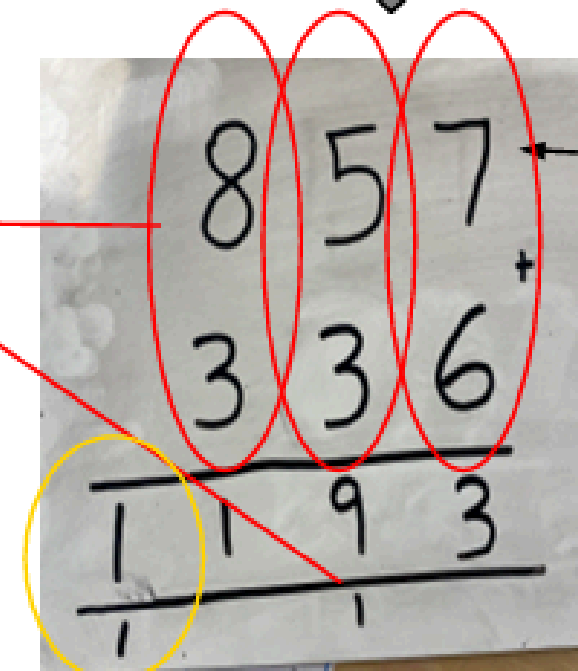
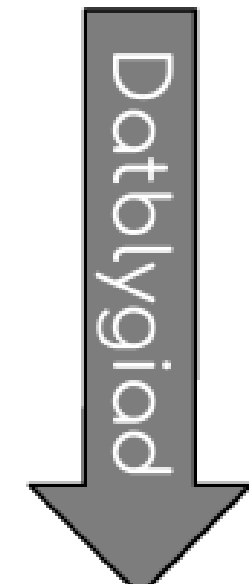


Dechrau o'r dde

Adio ar i lawr

Ateb rhwng y llinellau

Symud i'r chwith



Dechrau o'r dde

Adio ar i'w lawr

Ateb rhwng y llinellau

Symud i'r chwith

Os ydych yn adio rhifau gyda fwy o ddigidau, dilynwch union yr un camau sydd wedi cael eu amlinellu

3 digit + 3 digit

$$\begin{array}{r} 341 \\ + 126 \\ \hline 467 \end{array}$$

Start on right

Add downwards

Answer between lines

Move to left



If the 2 numbers add to more than 10 the units go under and tens move to the left.

Add the tens to the numbers in that column.

Continue to do this if the next column is also adding to more than 10

Add the tens to the numbers in that column

Continue to do this if the next column is also more than 10

If there is no other number in the column push the number underneath upwards.

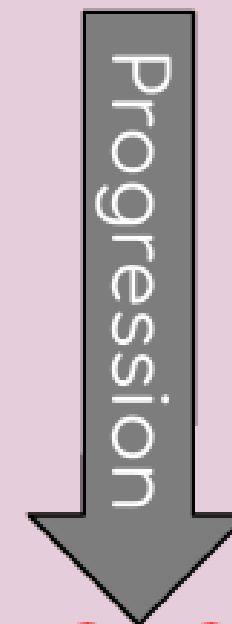
$$\begin{array}{r} 341 \\ + 159 \\ \hline 500 \end{array}$$

Start on right

Add downwards

Answer between lines

Move to left



If you are adding numbers with more digits, follow the exact same steps.

$$\begin{array}{r} 857 \\ + 336 \\ \hline 1193 \end{array}$$

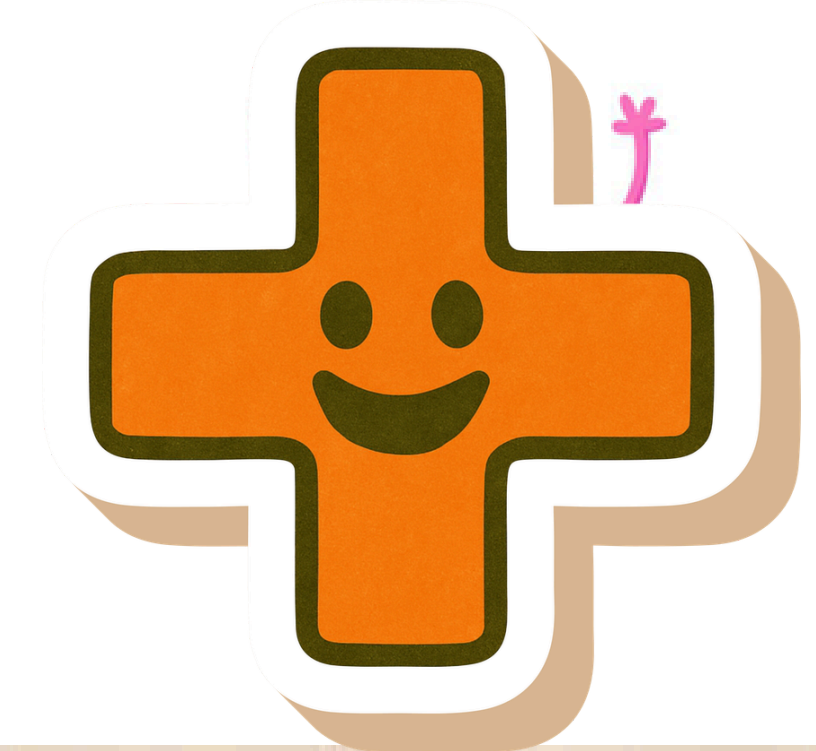
Start on right

Add downwards

Answer between lines

Move to left

Esiamplau Adio/Adding Examples



$$\begin{array}{r}
 37 \\
 + 18 \\
 \hline
 55 \\
 1
 \end{array}$$

$$\begin{array}{r}
 247 \\
 + 396 \\
 \hline
 643 \\
 1 \quad 1
 \end{array}$$

1 - 100 Grid

odd	even	odd	even	odd	even	odd	even	odd	even
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

45 + 17 = 62

1 - 100 Grid

odd	even	odd	even	odd	even	odd	even	odd	even
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

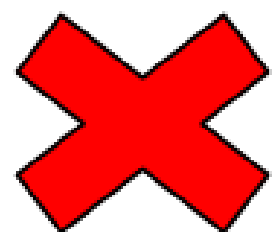
38 + 42 = 80

Adio gydag unedau amrywiol

Wrth adio rhifau sydd â gwahanol unedau, mae'n bwysig ein bod yn eu gosod o fewn y colofnau unedau cywir. Fel arall, gall yr uned 7 gael ei adio fel 70 ar ddamwain fel y gweler isod.

$$98 + 7 =$$

	D	U
	9	8
+	7	
<hr/>		
	1	6
		8



	D	U
	9	8
+		7
<hr/>		
	1	0
		5
		1



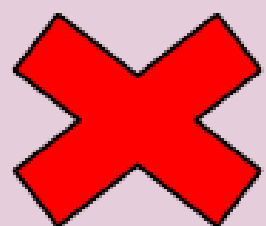
	M	C	D	U
			9	8
+			3	4
<hr/>				
	1	4	2	2
				2

Adding with various units

When adding with numbers with different units, it's important that we place them in the correct columns. Otherwise the unit 7 could be added as 70 by mistake as shown below.

$$98 + 7 =$$

	D	U	
	9	8	
+	7		
<hr/>			
1	6	8	
<hr/>			



	D	U	
	9	8	
+		7	
<hr/>			
1	0	5	
<hr/>			
		1	



	M	C	D	U
	1	4	9	3
+			3	4
<hr/>				
	5	5	2	7
<hr/>				
		1		

Adio gyda phwynt degol

	2	4	.	6
+	1	3	.	2
<hr/>				
	3	7	.	8

Dechrau o'r dde

Adio ar i lawr

Ateb rhwng y llinellau

Symud i'r chwith



Os yw'r 2 rhif yn adio i wneud mwy nag 10 mae'r unedau yn mynd o danodd a'r degau yn symud i'r golofn nesaf (o dan y linell)

Adio y degau i'r rhifau sydd yn y colofn yno

Parhau i wneud hyn
Os mae'r colofn nesaf hefyd yn fwy nag 10

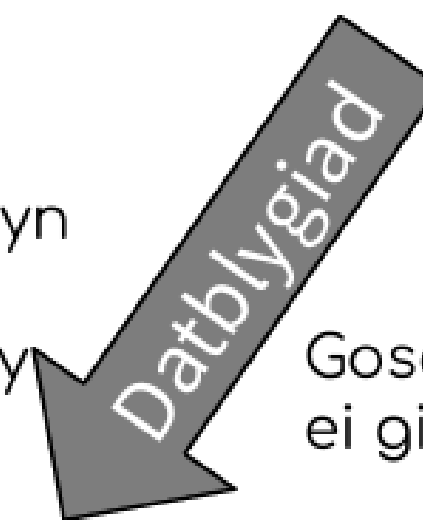
	2	4	.	6
+	1	3	.	7
<hr/>				
	3	8	.	3
		1		

Dechrau o'r dde

Adio ar i lawr

Ateb rhwng y llinellau

Symud i'r chwith



Gosod yr unedau cywir o dan ei gilydd

Dechrau o'r dde

Adio ar i lawr

Ateb rhwng y llinellau

Gosod y pwynt degol yn union o dan y gweddill yn y bwlch ateb

Symud i'r chwith

	1	4	8	.	7	8
+			2	.	3	6
<hr/>						
	1	5	1	.	1	4
		1	1		1	

Os ydych yn adio rhifau gyda fwy o ddigidau, dilynwch union yr un camau sydd wedi cael eu amlinellu.

Adding with a decimal point

If the two numbers add to make more than 10 the units then go underneath and the tens move to the next column (under the line). Add the tens to the numbers in that column.

Continue to do this if the next column is also more than 10.

	2	4	.	6
+	1	3	.	7
<hr/>				
	3	8	.	3
<hr/>				
		1		

Start on right

Add downwards

Answer between lines

Move to left

Start on right
Add downwards
Answer between lines
Move to left

Progression

Progression

Place the correct units under each other.

Start on right

Add downwards

Answer between lines

Place the decimal point underneath in between the lines.

Move to left

	2	4	.	6
+	1	3	.	2
<hr/>				
	3	7	.	8

	1	4	8	.	7	8	
+				2	.	3	6
<hr/>							
	1	5	1	.	1	4	
<hr/>							
		1	1	1			

If you are adding numbers with more units, follow the exact same steps.

Tynnu/ Subtract



Sgîl - tynnu rhifau 1 digid o fewn 10

7 - 3 = 4

First: Then: Now:

Number line: 1 2 3 4 5 6 7 8 9 10

Sgîl - tynnu rhifau 1 a 2 ddigid at 20

14 - 6 = 8

Number line: 1 2 3 4 5 6 7 8 9 10 11 12 13 14

Sgîl - tynnu rhifau 1 a 2 ddigid at 100

65 - 28 = 37

Number line: 28 30 60 65

Sgîl - tynnu dau rhif 2 ddigid

65 - 28 = 37

Sgîl - tynnu rhifau gyda hyd at 3 digid

435 - 273 = 262

Sgîl - tynnu rhifau gyda hyd at 4 digid

4,357 - 2,735 = 1,622

Sgîl - tynnu rhifau gyda mwy na 4 digid

294,382 - 182,501 = 111,881

HTh	TTh	Th	H	T	O
2	9	4	3	8	2
1	8	2	5	0	1
1	1	1	8	8	1

Sgîl - tynnu gyda hyd at 3 pwynt degol

5.43 - 2.7 = 2.73



Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Tynnu dau rhif 1 digid at 10	1	Model rhan-gyfan Model bar Siapiau rhif	Llinyn gleiniau (10) Traciau rhif Fframiau deg (o fewn 10)
Tynnu rhifau 1 a 2 digid at 20	1	Model rhan-gyfan Model bar Siapiau rhif Llinellau rhif (wedi labelu)	Llinyn gleiniau (20) Traciau rhif Fframiau deg (o fewn 20) Gwellt
Tynnu rhifau 1 a 2 digid at 100	2	Model rhan-gyfan Model bar Llinellau rhif (wedi labelu)	Llinyn gleiniau (20) Sgwar 100 Gwellt
Tynnu dau rhif 2 ddigid	2	Model rhan-gyfan Model bar Llinellau rhif (gwag) Adio colofnau	Bas 10 Cownteri gwerth lle Gwellt



Skill	Year	Representations and models	
Subtract two 1-digit numbers to 10	1	Part-whole model Bar model Number shapes	Ten frames (within 10) Bead strings (10) Number tracks
Subtract 1 and 2-digit numbers to 20	1	Part-whole model Bar model Number shapes Ten frames (within 20)	Bead string (20) Number tracks Number lines (labelled) Straws
Subtract 1 and 2-digit numbers to 100	2	Part-whole model Bar model Number lines (labelled)	Number lines (blank) Straws Hundred square
Subtract two 2-digit numbers	2	Part-whole model Bar model Number lines (blank) Straws	Base 10 Place value counters



Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Tynnu gyda hyd at 3 digid	3	Model rhan-gyfan Model bar Bas 10	Cownteri gwerth lle Adio colofnau
Tynnu gyda hyd at 4 digid	4	Model rhan-gyfan Model bar Bas 10	Cownteri gwerth lle Adio colofnau
Tynnu gyda mwy na 4 digid	5	Model rhan-gyfan Model bar	Cownteri gwerth lle Adio colofnau
Tynnu gyda hyd at 3 pwynt degol	5	Model rhan-gyfan Model bar	Cownteri gwerth lle Adio colofnau



Skill	Year	Representations and models	
Subtract with up to 3-digits	3	Part-whole model Bar model	Base 10 Place value counters Column subtraction
Subtract with up to 4-digits	4	Part-whole model Bar model	Base 10 Place value counters Column subtraction
Subtract with more than 4 digits	5	Part-whole model Bar model	Place value counters Column subtraction
Subtract with up to 3 decimal places	5	Part-whole model Bar model	Place value counters Column subtraction

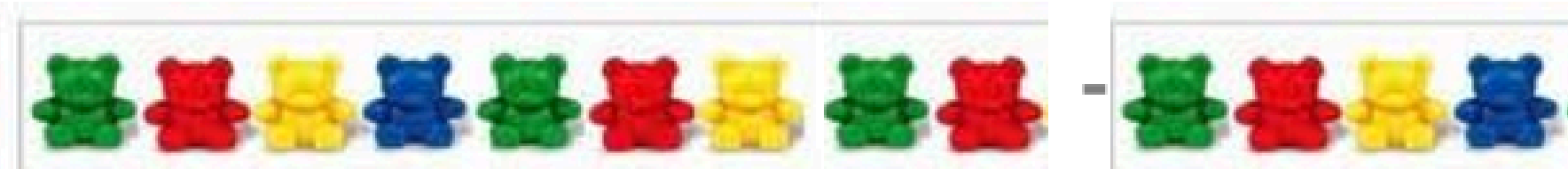
1 digid - 1 digid

“Naw tynnu pedwar yn hafal i 5”

$$9 - 4 = 5$$



Cyfrif 9 gwrthrych, gofyn i'r plentyn tynnu 4.
Cyfrif faint o wrthrychau sydd ar ol.



Neidio yn ol un rhif ar y tro



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Dewis numicon cywir, tynnu un o'r llall i gael yr ateb cywir.

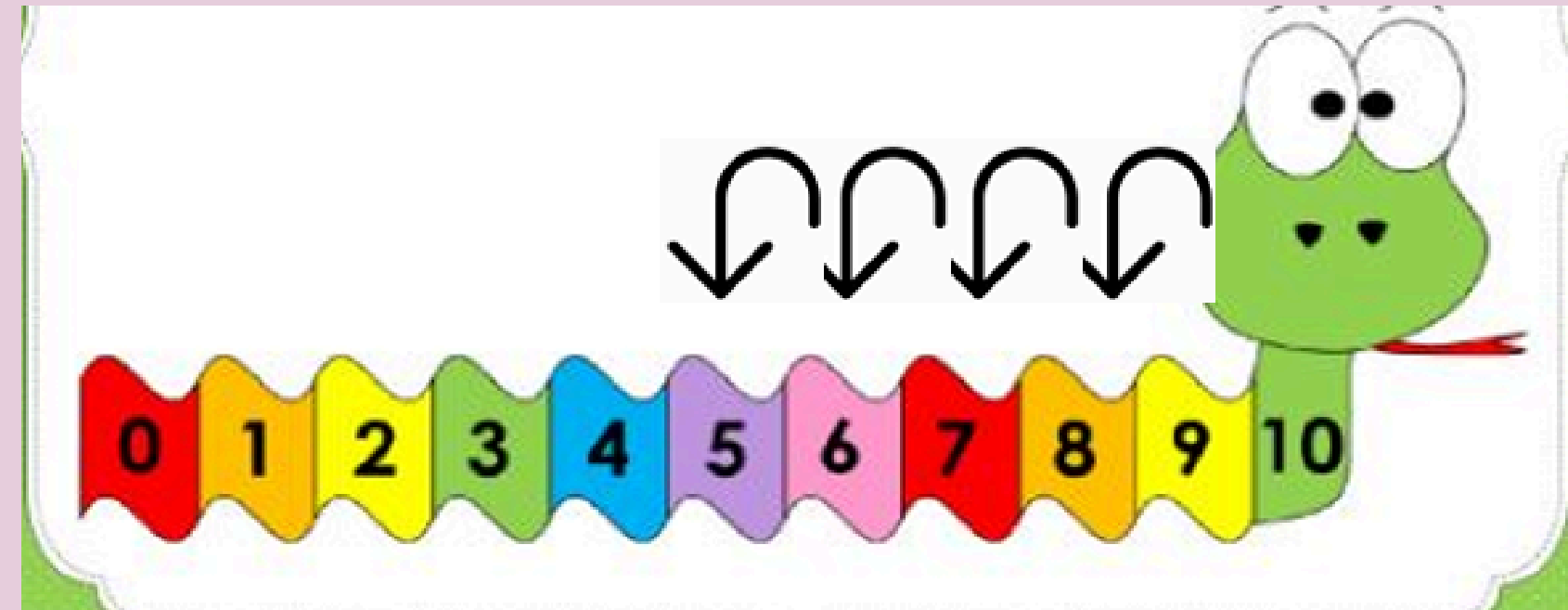


“Nine take away four equals to five”

1 digit - 1 digit

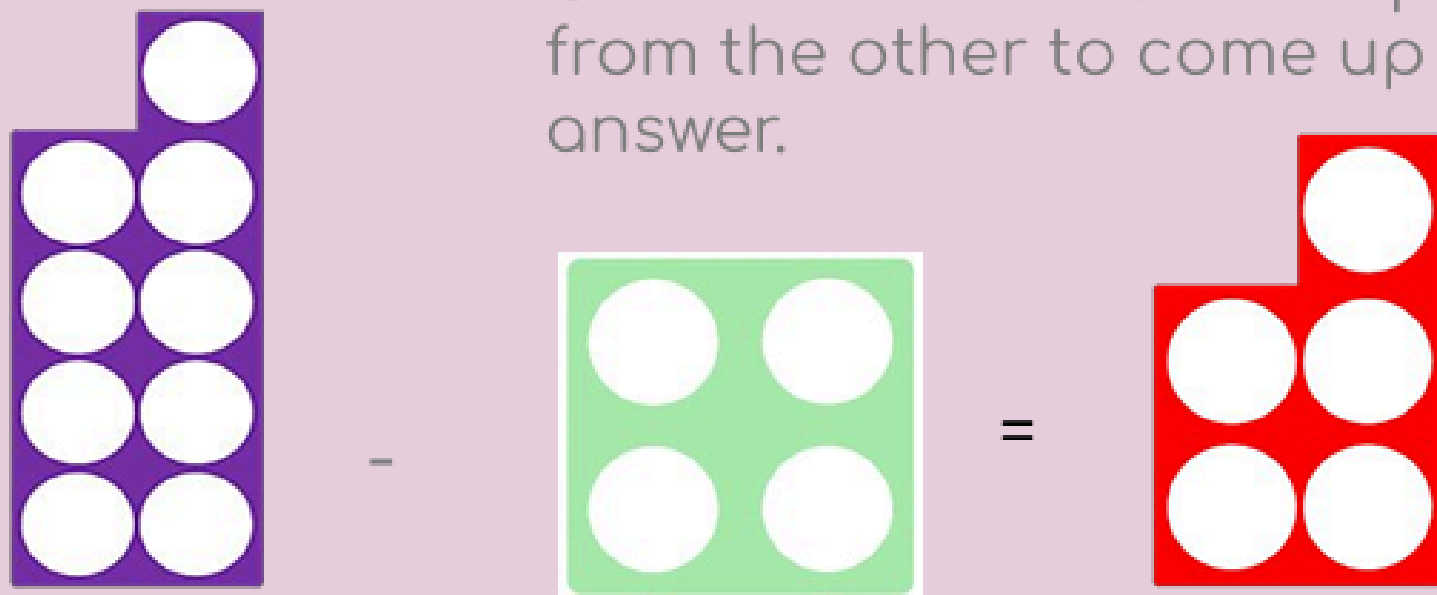
$$9 - 4 = 5$$

Count 9 objects, take away 4 and count how many are left.

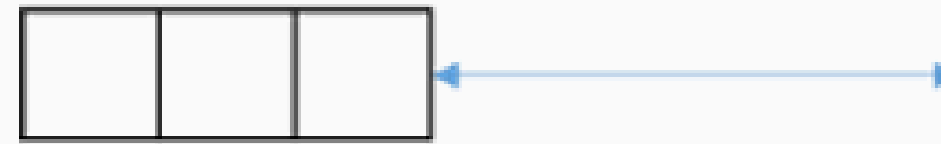
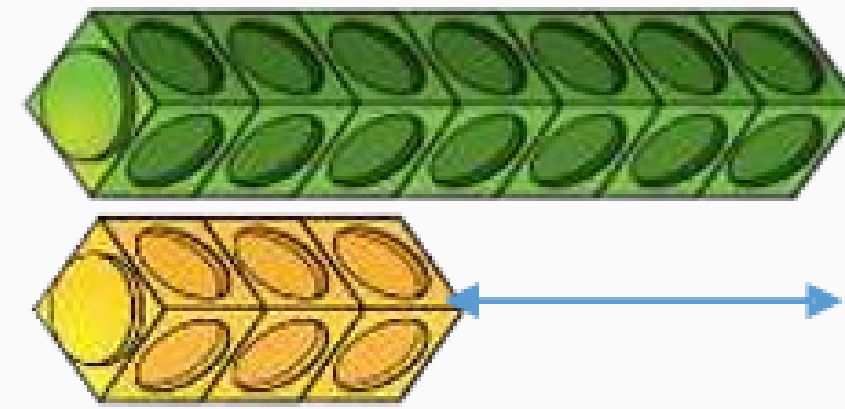
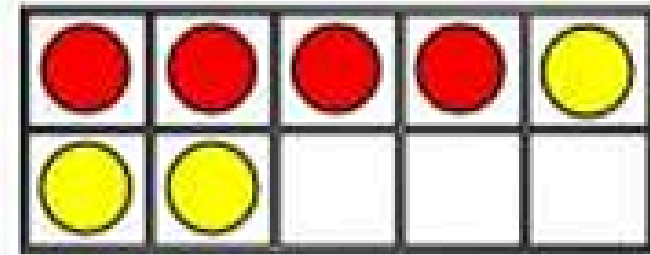
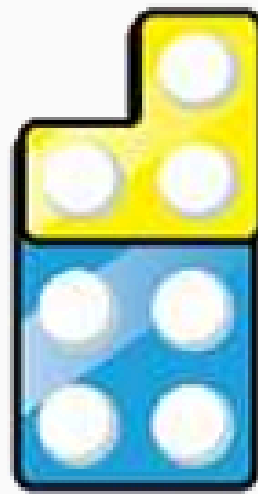
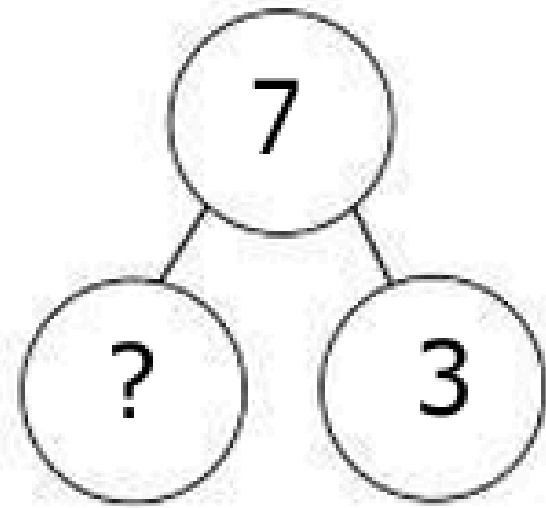


Jump backwards one at a time

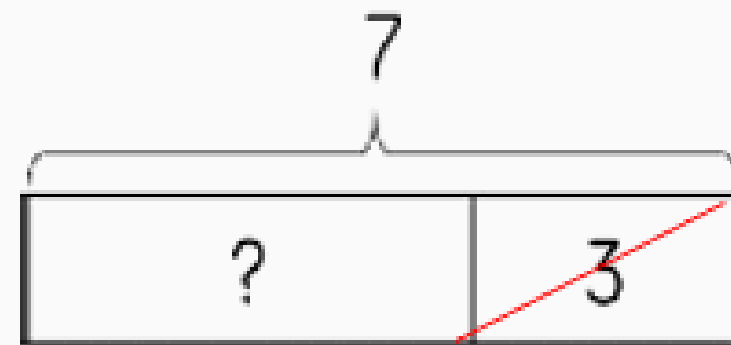
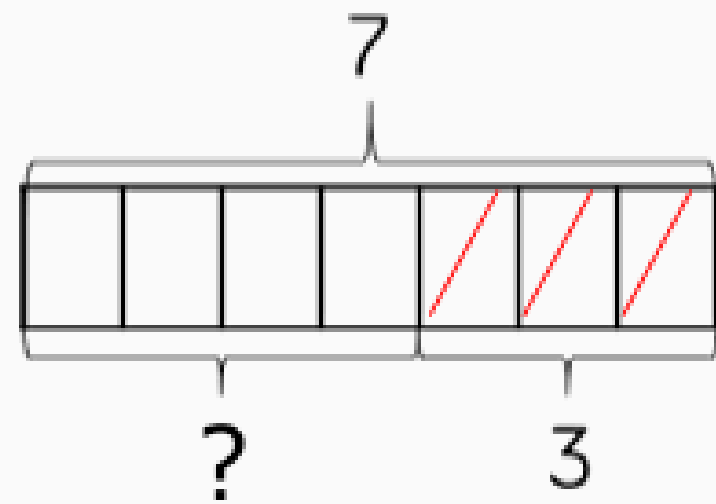
Choose correct numicon plates, take one from the other to come up with the correct answer.



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



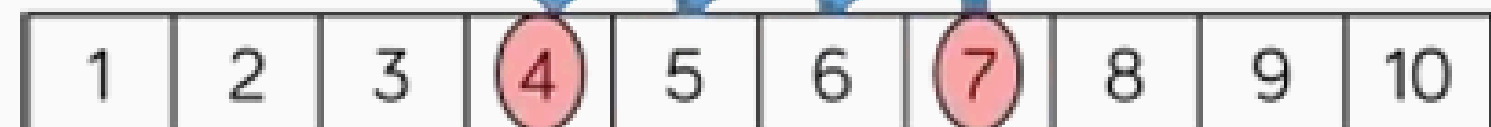
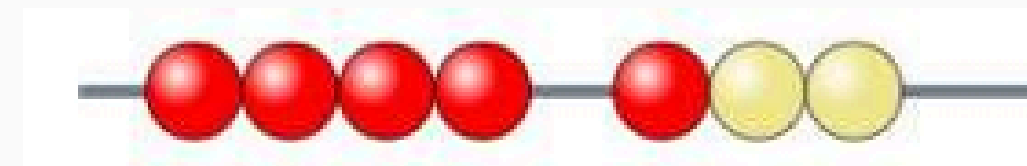
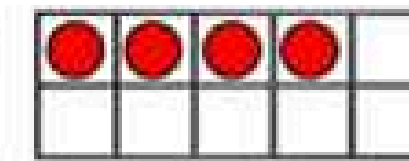
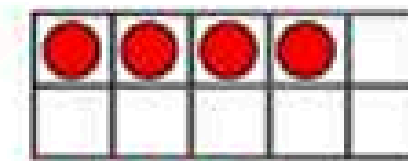
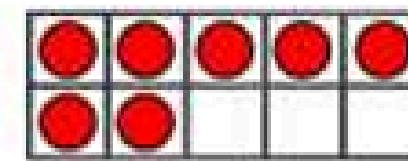
$$7 - 3 = 4$$



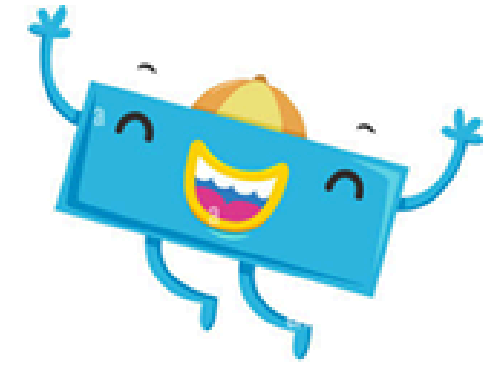
First

Then

Now



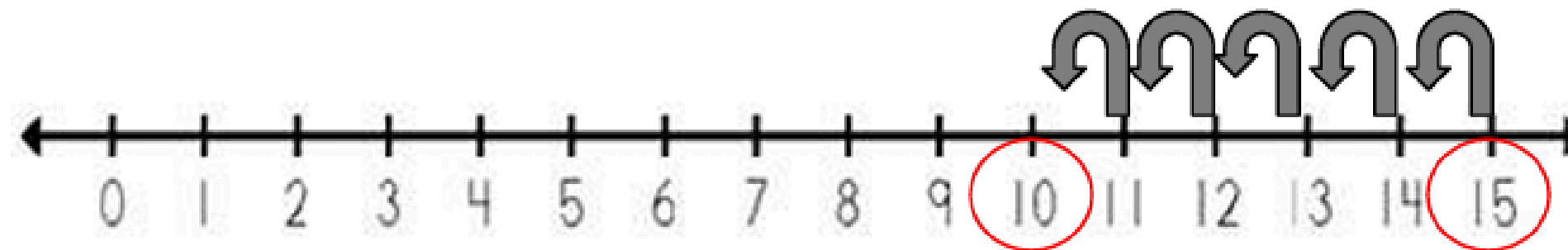
2 digid - 1 digid



“Un deg pump tynnu pump yn hafal i ddeg”

$$15 - 5 = 10$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



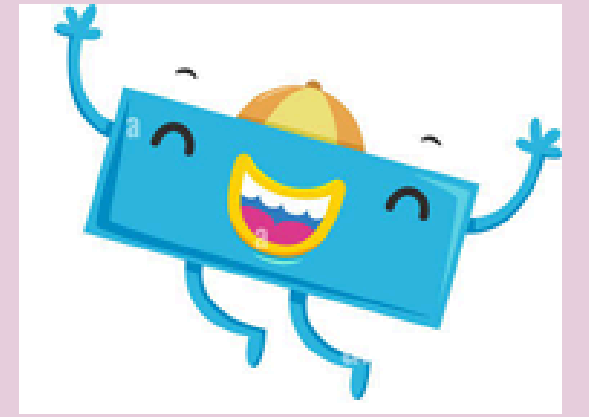
15 yn y pen a cyfri nôl 5



Llinell rif / Sgwar 100
Cyfrif yn ol un rhif ar y tro

2 digit - 1 digit

“Fifteen minus five equals ten”



$$15 - 5 = 10$$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



15 in your head and
count back 5



Number line/Hundred square
Count back one number at a time

Tynnu Gyda Sgwar 100 a/neu yn eich pen

1 - 100 Grid										
odd	even	odd	even	odd	even	odd	even	odd	even	
1	2	3	4	5	6	7	8	9	10	
11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	
31	32	33	34	35	36	37	38	39	40	
41	42	43	44	45	46	47	48	49	50	
51	52	53	54	55	56	57	58	59	60	
61	62	63	64	65	66	67	68	69	70	
71	72	73	74	75	76	77	78	79	80	
81	82	83	84	85	86	87	88	89	90	
91	92	93	94	95	96	97	98	99	100	

$$87 - 29 = 58$$

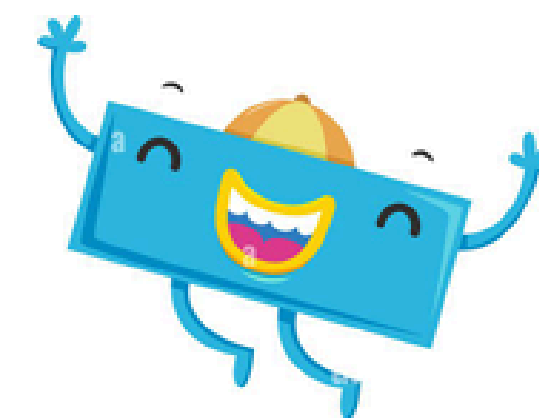
Ffeindio'r rhif cyntaf.

Tynnu'r degau gyntaf.

Cyfri nôl yr unedau un ar y tro.

1 - 100 Grid										
odd	even	odd	even	odd	even	odd	even	odd	even	
1	2	3	4	5	6	7	8	9	10	
11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	
31	32	33	34	35	36	37	38	39	40	
41	42	43	44	45	46	47	48	49	50	
51	52	53	54	55	56	57	58	59	60	
61	62	63	64	65	66	67	68	69	70	
71	72	73	74	75	76	77	78	79	80	
81	82	83	84	85	86	87	88	89	90	
91	92	93	94	95	96	97	98	99	100	

$$73 - 24 = 49$$



$87 - 21 = 87$ yn eich pen, tynnu degau gyntaf $87 - 20 = 67$ yna tynnu'r unedau $67 - 1 = 66$

Tynnu Gyda Sgwar 100 or/and in your head

1 - 100 Grid

odd	even	odd	even	odd	even	odd	even	odd	even
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

87 - 29 = 58

Find the first number.

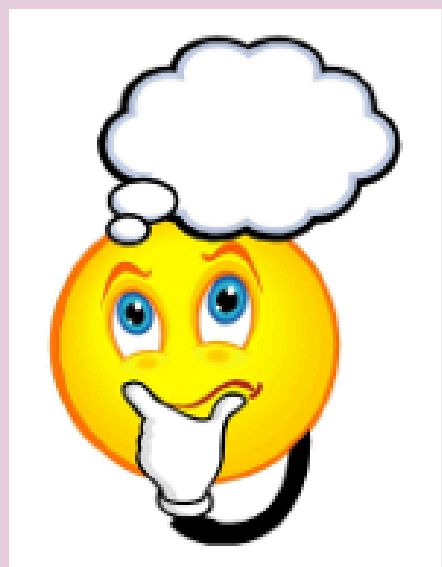
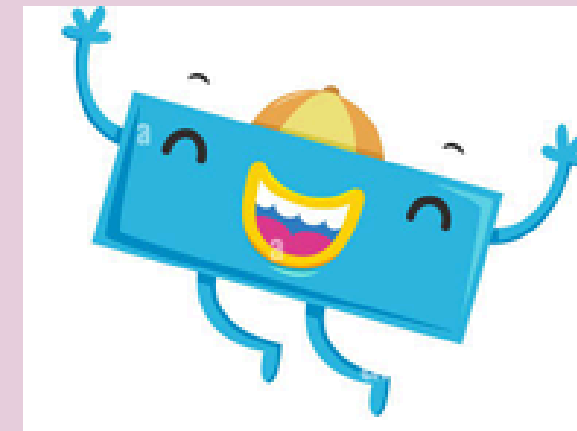
Take away the tens first.

Count back the units.

1 - 100 Grid

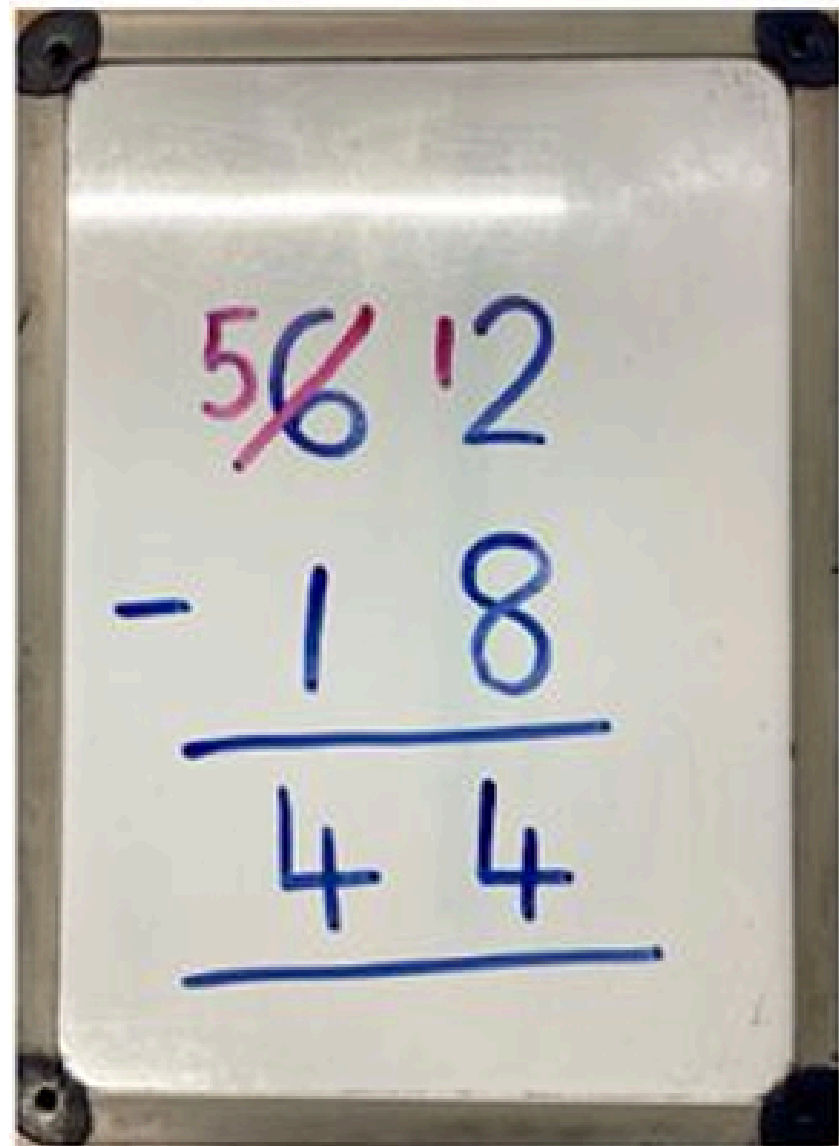
odd	even	odd	even	odd	even	odd	even	odd	even
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

73 - 24 = 49



87 - 21 = 87 in your head, take away the tens first 87 - 20 = 67 then take away the units 67 - 1 = 66

2 digid - 2 digid



Cychwyn ar y dde.

Os yw'r uned yn llai ar y top nac ar y gwaelod, benthyc 'deg' o'r degau.

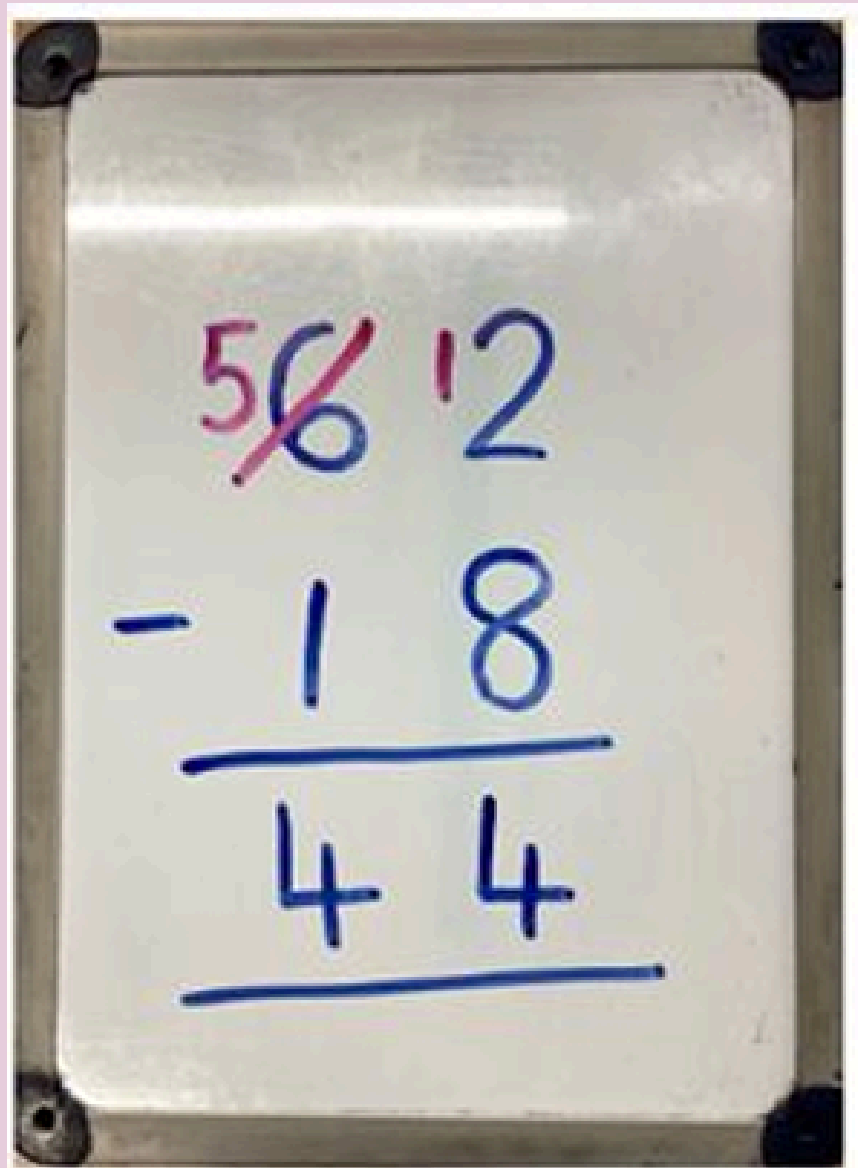
Dangos hyn fel yn y diagram.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Neu defnyddio sgwar cant. Tynnu degau gyntaf yna yr unedau.



2 digit - 2 digit



Start on the right..

If the unit is less on top than the bottom. 'Borrow' from the tens.

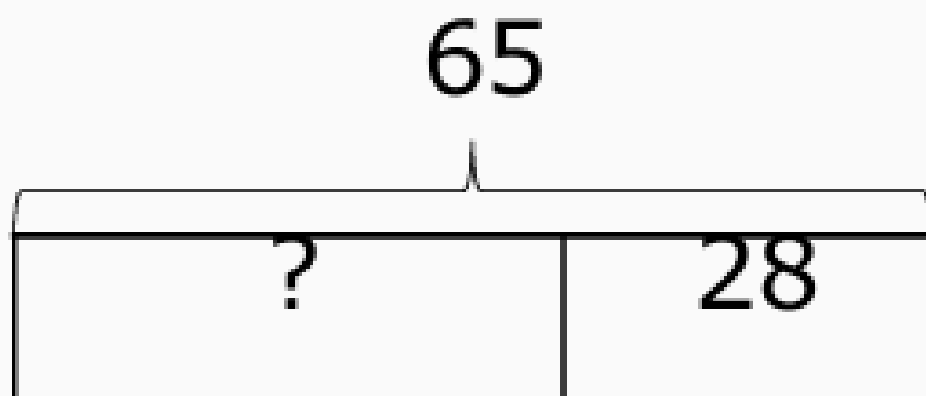
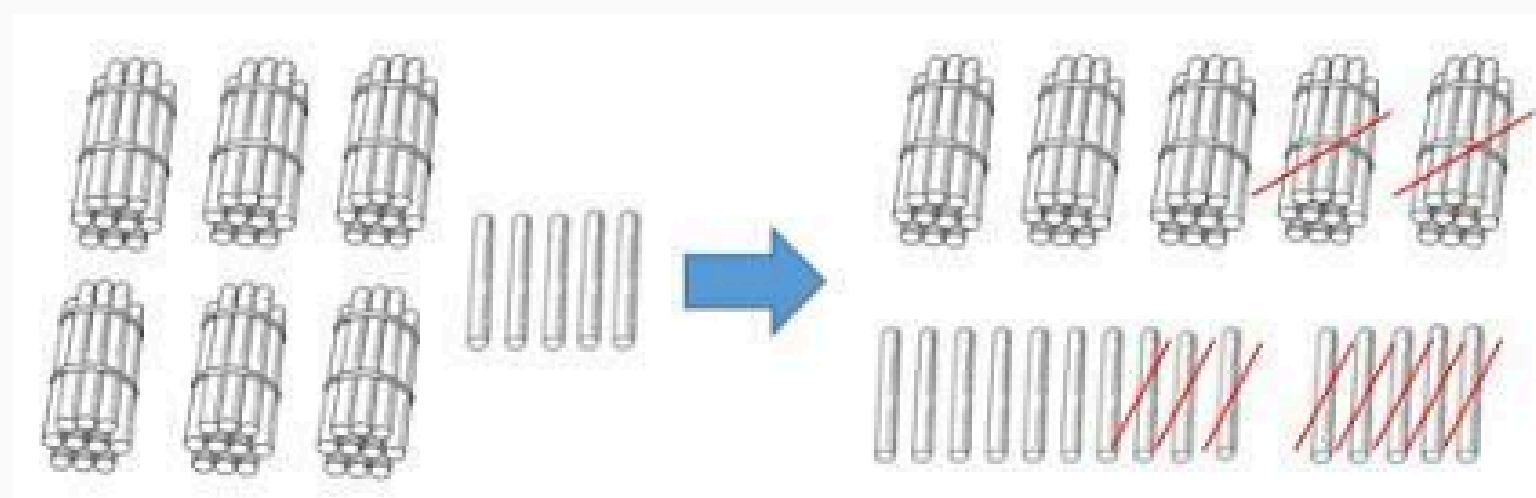
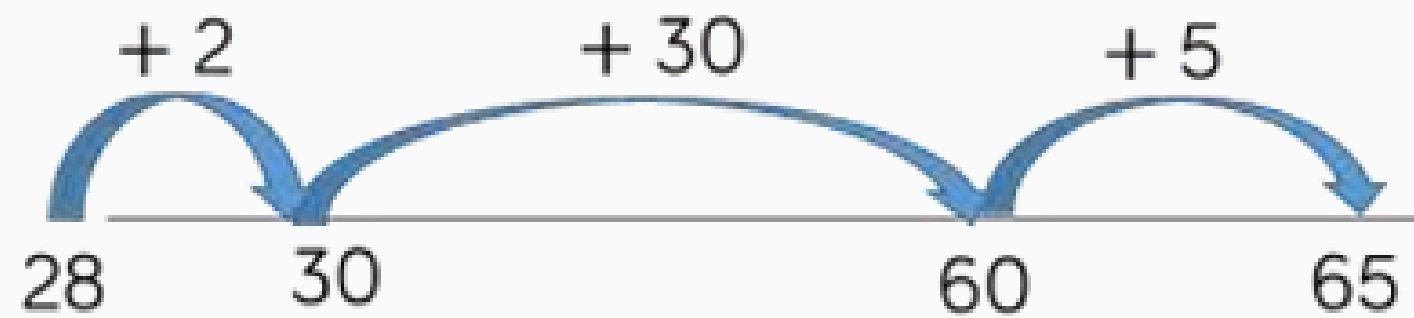
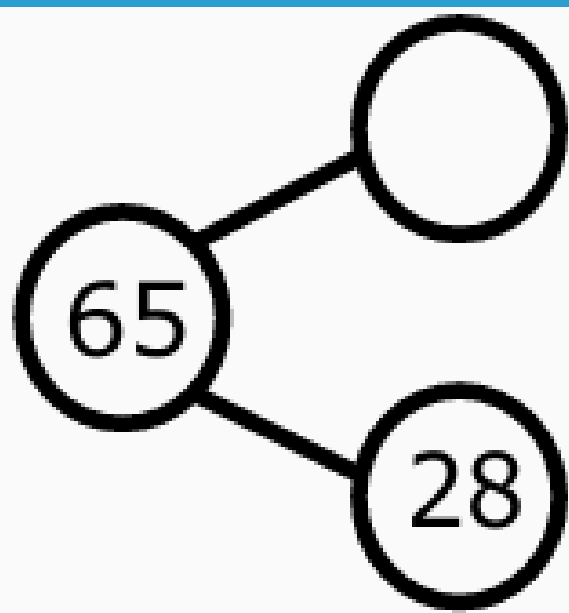
Show this as the diagram shows.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

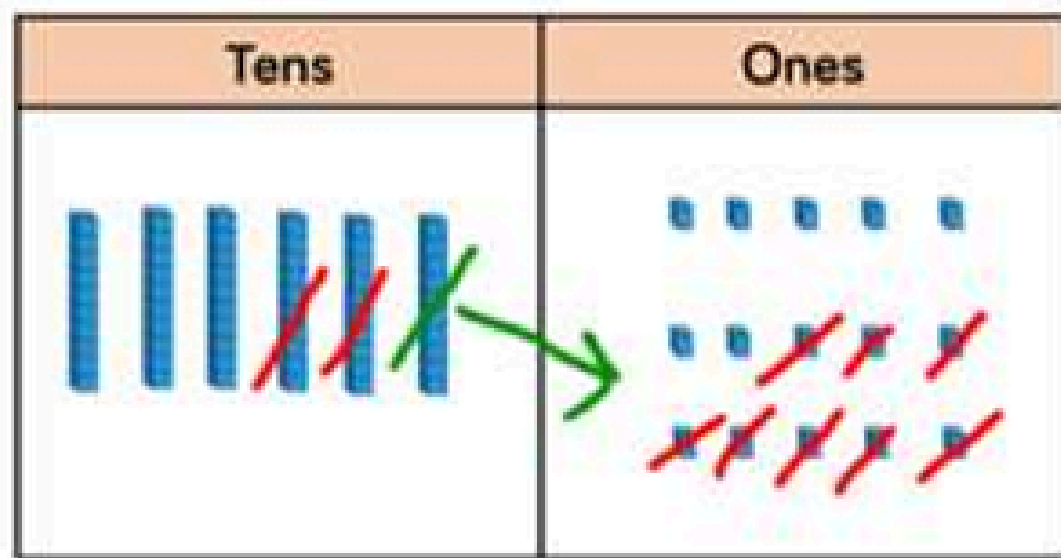
The diagram shows a 10x10 grid of numbers from 1 to 100. A red circle highlights the numbers 52 and 62. A grey arrow points from 62 to 52. A series of grey arrows points from 34 to 44, 44 to 54, 54 to 64, 64 to 74, 74 to 84, and 84 to 94, illustrating the borrowing process.

Or use a hundred square. Take away the tens first then the units.

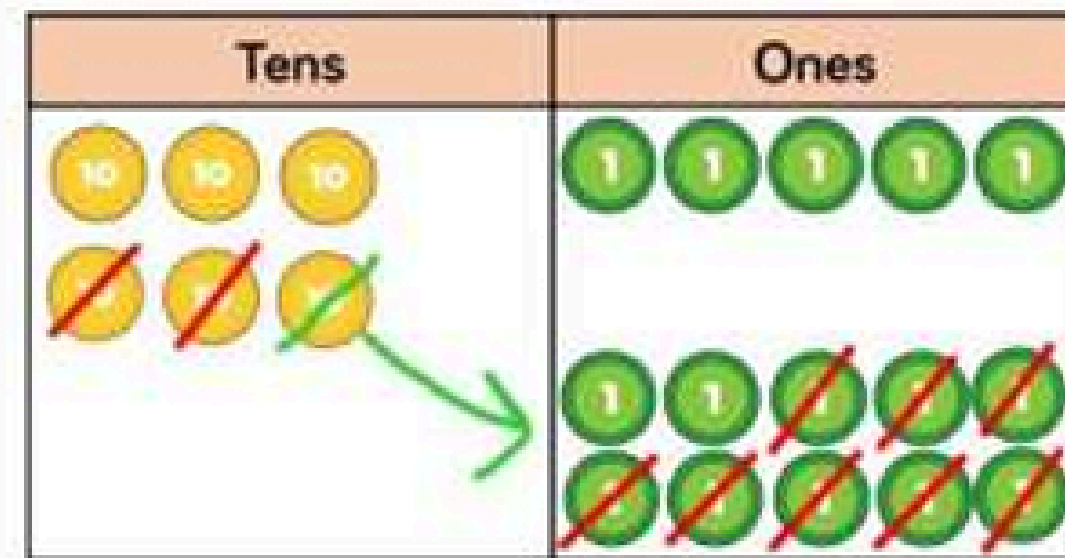




65 — 28 = 37



$$\begin{array}{r}
 5 \quad 1 \\
 65 \\
 - 28 \\
 \hline
 37
 \end{array}$$



3 digid - 2 digid

A whiteboard with a wooden frame and black corner protectors. It displays a subtraction problem in blue marker. The top row is '892' with a red diagonal slash through the '9'. Below it is a minus sign followed by '367'. A horizontal line separates this from the result '525', which is also underlined. The numbers are aligned to the right.

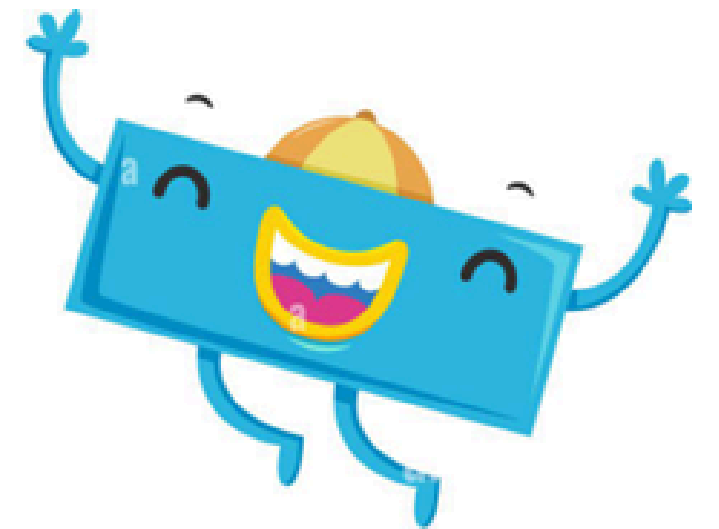
$$\begin{array}{r} 892 \\ - 367 \\ \hline 525 \end{array}$$

Cychwyn ar y dde.

Os yw'r uned yn llai ar y top nac ar y gwaelod, benthycg 'deg' o'r degau.

Ceir wneud hyn mwy nag unwaith.

Dangos hyn fel yn y diagram.



3 digid - 2 digid

A whiteboard with a subtraction problem written in blue marker. The problem is $89128 - 367 = 561$. The number 89 is crossed out with a red diagonal line. There are two horizontal lines under the numbers 367 and 561, indicating the subtraction process.

Start on the right..

If the unit is less on top than the bottom. 'Borrow' from the tens.

You can do this more than once.

Show this as the diagram shows.



3 digid - 3 digid

	8	4	7
-	6	1	2
	2	3	5

Sicrhau fod y rhif mwyaf ar y linell uchaf

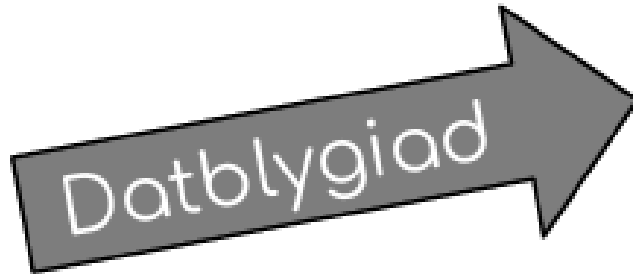
Dechrau o'r dde

Tynnu'r rhif gwylod i ffwrdd o'r rhif top

Ateb rhwng y llinellau

Symud i'r chwith

Os ydych yn tynnu rhifau gyda fwy o ddigidau, dilynwch union yr un camau sydd wedi cael eu amlinellu



Os yw'r rhif top yn llai na'r rhif ar y gwylod; bydd angen 'menthyg' gan y rhif drws nesaf i'r chwith..

Felly bydd y rhif 'drws nesaf' yn newid i fod un digid yn llai.

Yna, bydd y rhif sydd wedi'w 'fenthyg' yn gweithredu fel 'deg' ar gyfer y rhif sydd ei angen.

Os mae llawer o'r rhifau uchaf yn llai na'r gwylod, bydd rhaid 'menthyg' gan y digidau ar y chwith tan y cawn lwyddiant.

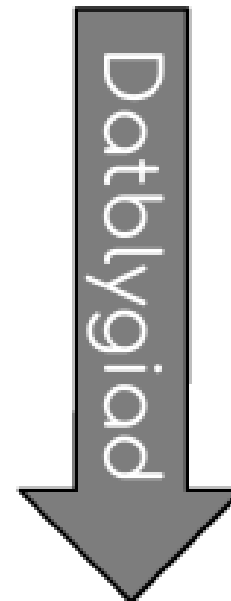
Mae pob 'menthyciad' yn dilyn yr un broses.

	⁷ 8	⁴	7
-	6	8	2
	1	6	5

Rhif mwyaf ar y linell uchaf

Dechrau o'r dde

Tynnu'r rhif gwylod i ffwrdd o'r rhif uchaf



Ateb rhwng y llinellau

Symud i'r chwith

Rhif mwyaf ar y linell uchaf

Dechrau o'r dde

Tynnu'r rhif gwylod i ffwrdd o'r rhif uchaf

Ateb rhwng y llinellau

Symud i'r chwith

	⁷ 8	⁹ 0	²
-	2	8	4
	5	1	8

3 digit - 3 digit

← Ensure the highest number is on the highest line.

$$\begin{array}{r} 847 \\ - 612 \\ \hline 235 \end{array}$$

Start on the right.

Take away the bottom number away from the top.

Answer between the lines.

Move to the left.

If you are taking away numbers with more digits, follow the exact same steps outlined.



If the number on top is less than the number on the bottom you will need to borrow from the number next to it on the left.

So the number next door will change to be one less.

Then the number 'borrowed' will act like a ten for the number that needs it.

If many of the top numbers are less than the bottom numbers you will need to 'borrow' from the digits on the left until it works out.

Every 'borrowing' follows the same process.

$$\begin{array}{r} 7 \\ \cancel{8} 47 \\ - 682 \\ \hline 165 \end{array}$$

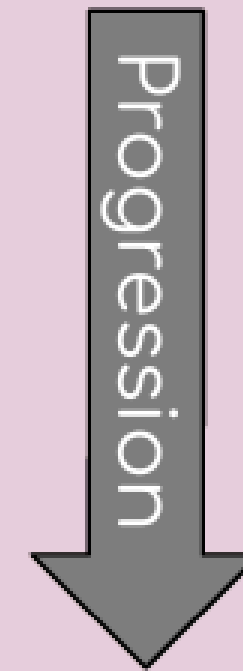
Ensure the highest number is on the highest line.

Start on the right.

Take away the bottom number away from the top.

Answer between the lines.

Move to the left



$$\begin{array}{r} 7 \quad 9 \\ \cancel{8} \quad \cancel{0} \quad 12 \\ - 284 \\ \hline 518 \end{array}$$

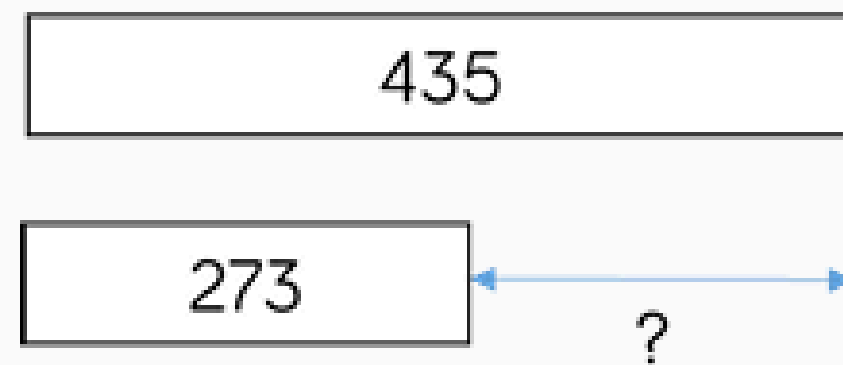
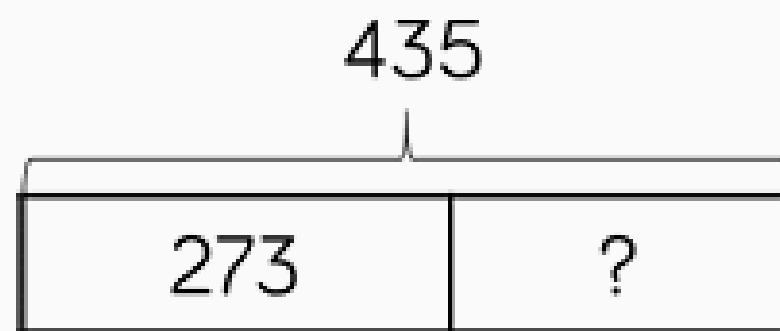
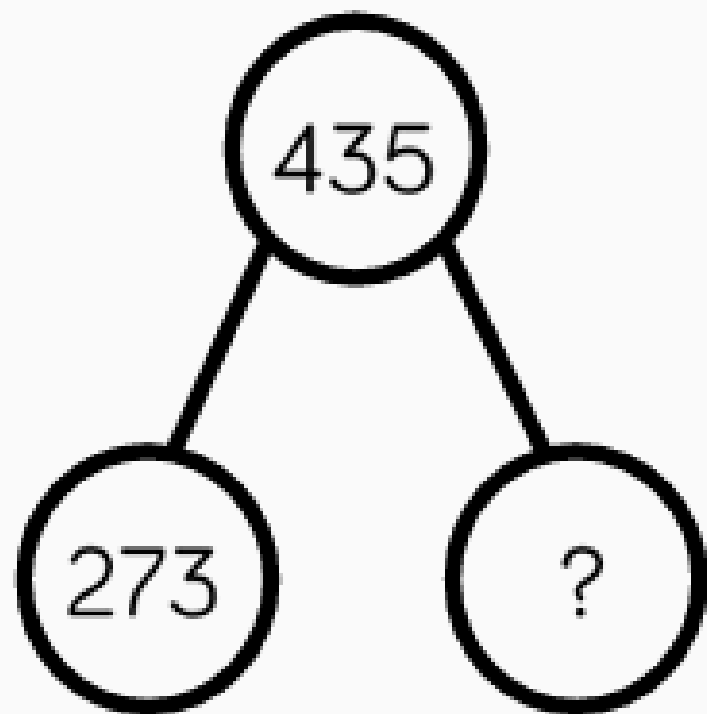
Ensure the highest number is on the highest line.

← Start on the right.

Take away the bottom number away from the top.

Answer between the lines.

Move to the left



$$435 - 273 = 262$$

Hundreds	Tens	Ones

$$\begin{array}{r}
 \overset{3}{4}\overset{1}{3}5 \\
 - 273 \\
 \hline
 262 \\
 \hline
 \end{array}$$

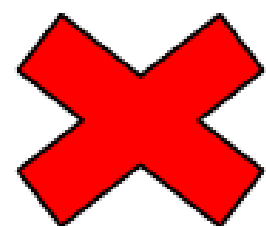
Hundreds	Tens	Ones

Tynnu gydag unedau amrywiol

Wrth dynnu rhifau sydd â gwahanol unedau, mae'n bwysig ein bod yn eu gosod o fewn y colofnau unedau cywir. Fel arall, gall yr uned 7 gael ei adio fel 70 ar ddamwain fel y gweler isod.

$$98 - 7 =$$

	D	U	
	9	8	
-	7		
<hr/>			
	2	8	



	D	U	
	9	8	.
-		7	
<hr/>			
	9	1	

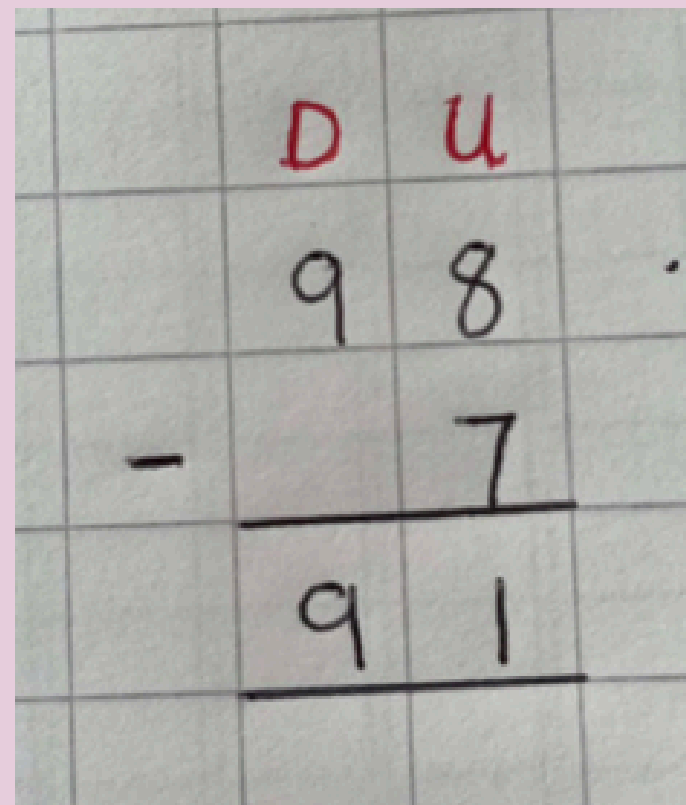
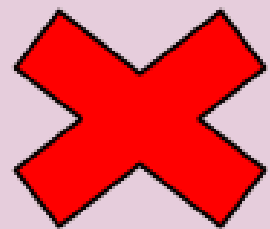
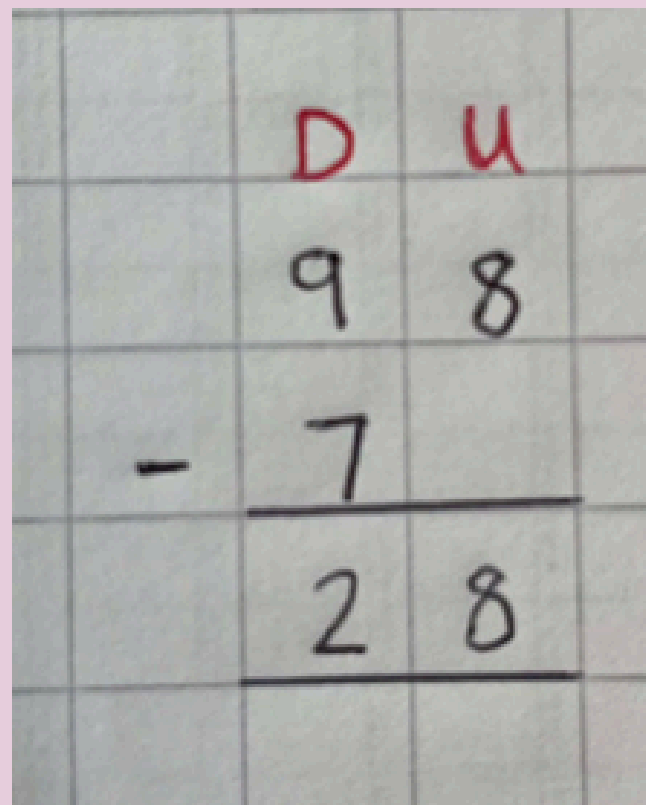


	M	C	D	U
	1	4	6	7
-		2	3	1
<hr/>				
	1	2	3	6

Subtraction with various units

By subtracting numbers with different units, it's important that we place them in the correct columns. Otherwise the unit 7 could be added as 70 incorrectly as shown below.

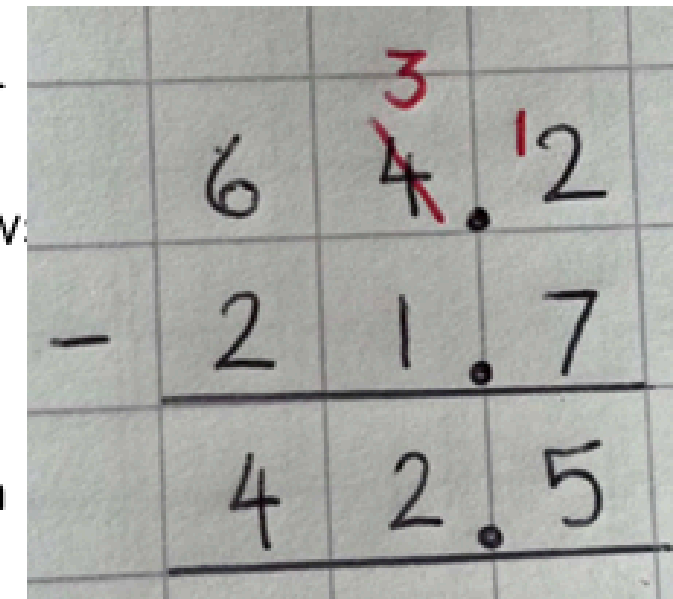
$$98 - 7 =$$



	M	C	D	U
	1	4	6	7
-		2	3	1
<hr/>				
	1	2	3	6

Tynnu gyda phwynt degol

Os yw'r rhif ar y linell uchaf yn llai na'r rhif ar y gwylod; bydd angen 'menthyg' gan y rhif drws nesaf i'r chwith..



Rhif mwyaf ar y linell uchaf

Dechrau o'r dde

Tynnu'r rhif gwylod i ffwrdd o'r rhif uchaf

Ateb rhwng y llinellau

Symud i'r chwith

Rhif mwyaf ar y linell uchaf

Dechrau o'r dde

Ychwanegu sero i unrhyw fylchau

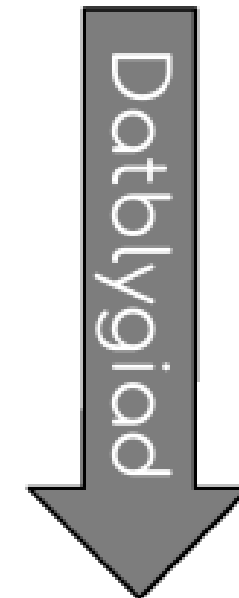
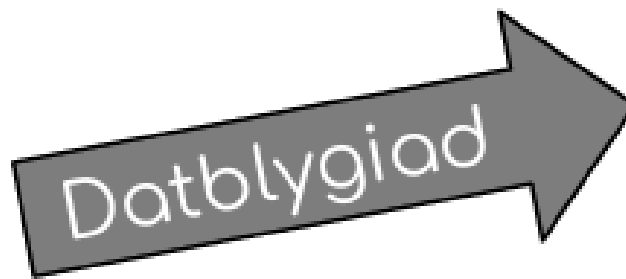
Tynnu'r rhif gwylod i ffwrdd o'r rhif uchaf

Ateb rhwng y llinellau

Gosod y pwynt degol o fewn yr ateb

Felly bydd y rhif 'drws nesaf' yn newid i fod un digid yn llai.

Yna, bydd y rhif sydd wedi'w 'fenthyg' yn gweithredu fel 'deg' ar gyfer y rhif sydd ei angen.



Sicrhau fod y rhif mwyaf ar y linell uchaf

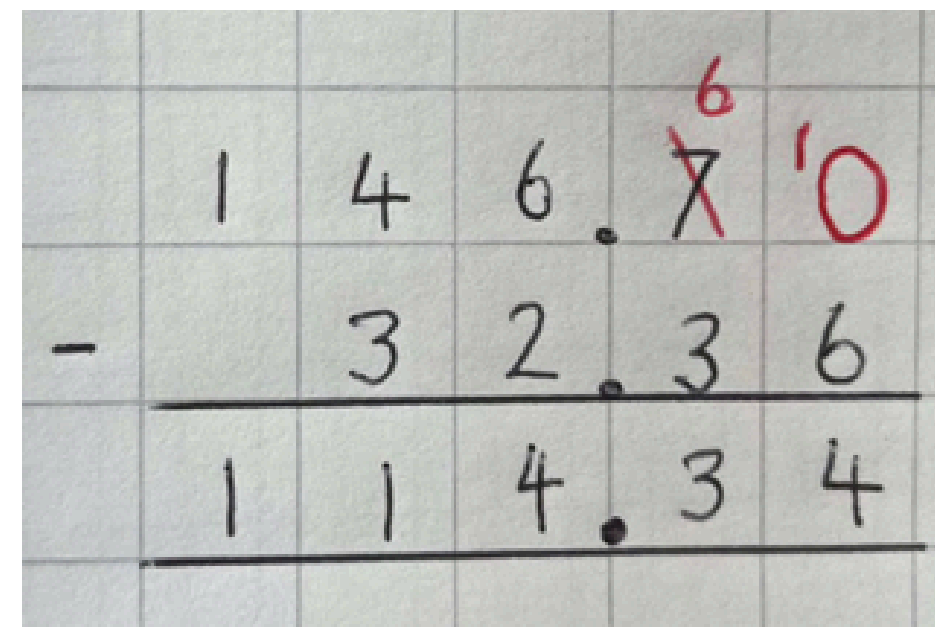
Dechrau o'r dde

Tynnu'r rhif gwylod i ffwrdd o'r rhif uchaf

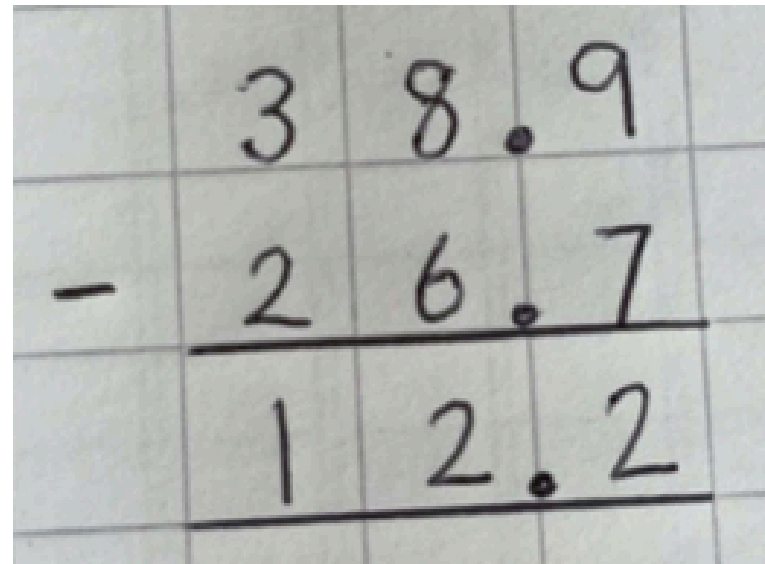
Ateb rhwng y llinellau

Symud i'r chwith

Os nad oes unedau hafal, ychwanegwch sero i'r bylchau.



Os ydych yn tynnu rhifau gyda fwy o ddigidau, dilynwch union yr un camau sydd wedi cael eu amlinellu



Subtracting with a decimal point

$$\begin{array}{r} 38.9 \\ - 26.7 \\ \hline 12.2 \end{array}$$

Ensure the highest number is on the highest line.

Start on the right.

Take away the bottom number away from the top.

Answer between the lines.

Move to the left

If you take away numbers will more digits follow the exact same steps outlined.



If the number of the top line is less than the number on the bottom you will need to 'borrow' from the number on the left.

Sp the number 'next door' will change to be one less.

Then the number borrowed will act as 'ten' for the number required.

If the units are not equal add a zero to the box.

$$\begin{array}{r} 64.2 \\ - 21.7 \\ \hline 42.5 \end{array}$$

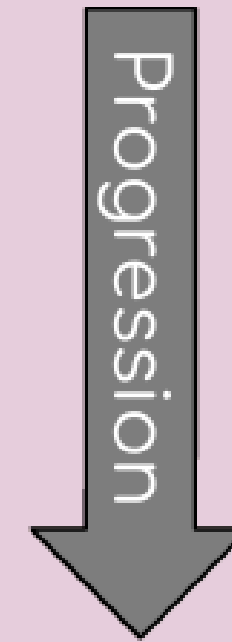
Ensure the highest number is on the highest line.

Start on the right.

Take away the bottom number away from the top.

Answer between the lines.

Move to the left



$$\begin{array}{r} 146.0 \\ - 32.36 \\ \hline 114.34 \end{array}$$

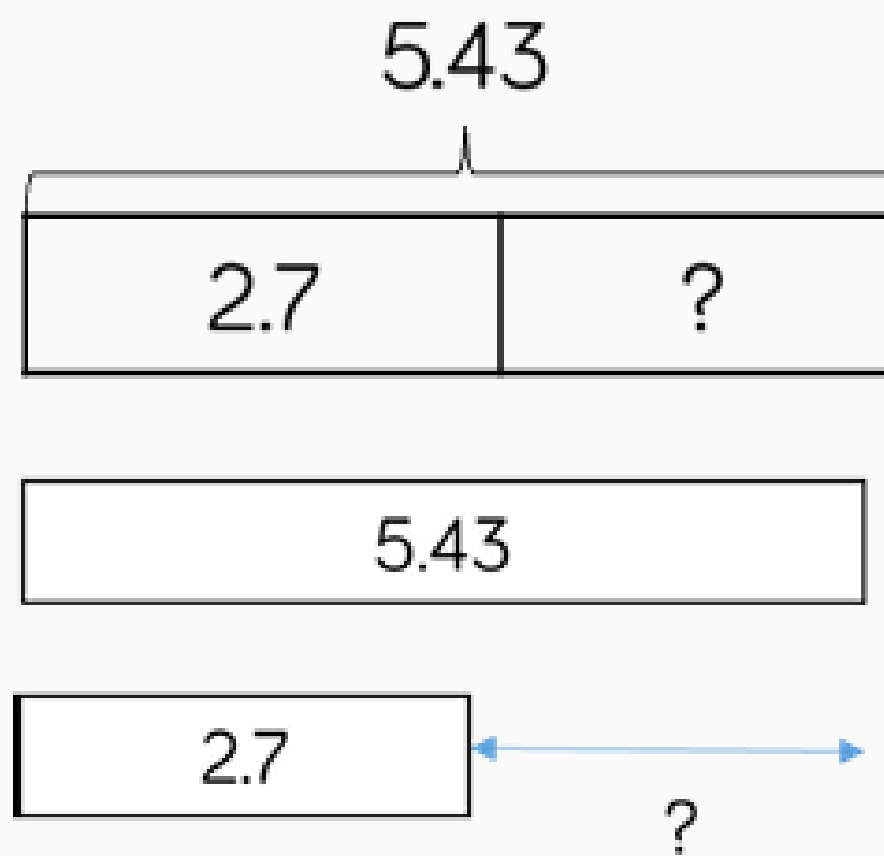
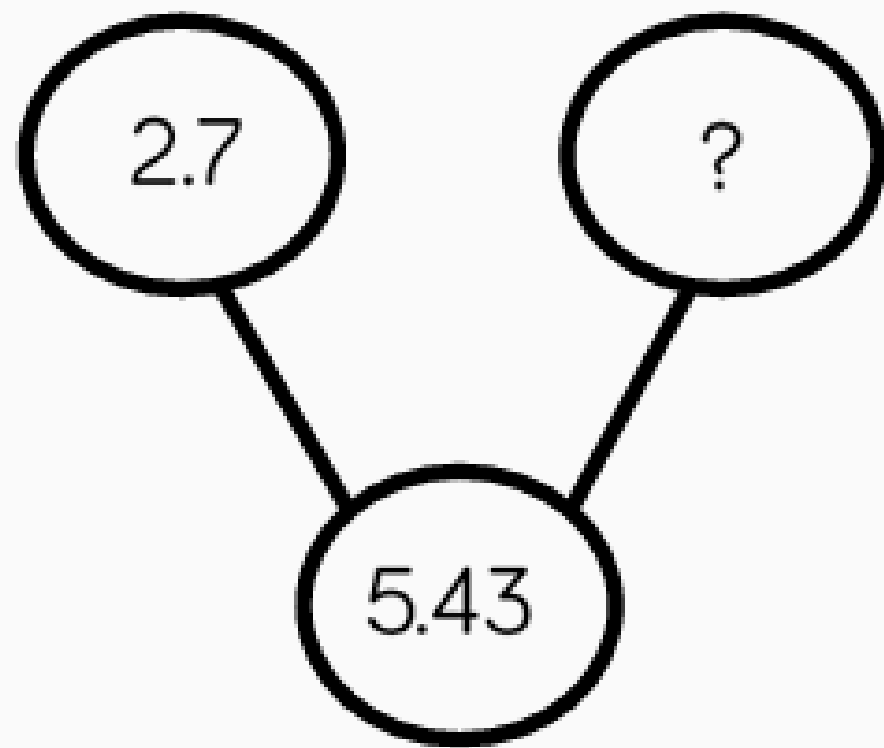
Ensure the highest number is on the highest line.

Start on the right.

Take away the bottom number away from the top.

Answer between the lines.

Move to the left



$$\begin{array}{r}
 \overset{4}{\cancel{5}}.\overset{1}{\cancel{4}}3 \\
 - 2.7 \\
 \hline
 2.73
 \end{array}$$

$$5.43 - 2.7 = 2.73$$

Ones	Tenths	Hundredths
<div style="display: flex; justify-content: space-around;"> 1 1 1 1 </div>	<div style="display: flex; justify-content: space-around;"> 0.1 0.1 0.1 0.1 </div>	<div style="display: flex; justify-content: space-around;"> 0.01 0.01 0.01 </div>
<div style="display: flex; justify-content: space-around;"> 1 </div>	<div style="display: flex; justify-content: space-around;"> 0.1 0.1 0.1 0.1 </div>	
	<div style="display: flex; justify-content: space-around;"> 0.1 0.1 0.1 0.1 </div>	
	<div style="display: flex; justify-content: space-around;"> 0.1 0.1 </div>	

Ones	Tenths	Hundredths
<div style="display: flex; justify-content: space-around;"> 1 1 1 </div>	<div style="display: flex; justify-content: space-around;"> 1 1 1 </div>	<div style="display: flex; justify-content: space-around;"> 1 1 1 </div>
<div style="display: flex; justify-content: space-around;"> 1 1 </div>	<div style="display: flex; justify-content: space-around;"> 1 </div>	
	<div style="display: flex; justify-content: space-around;"> 1 1 1 </div>	
	<div style="display: flex; justify-content: space-around;"> 1 1 1 </div>	
	<div style="display: flex; justify-content: space-around;"> 1 1 1 </div>	
	<div style="display: flex; justify-content: space-around;"> 1 </div>	

Lluosi/ Multiply





Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Datrys problemau un cam gyda lluosï	1/2	Model Bar Numicon Cownteri	Framiau 10 Llinyn gleiniau Llinell Rhif
Lluosi rhifau 2 ddigid â rhifau 1 digid	3/4	Cownteri gwerth lle Bas 10	Dull ysgrifenedig byr Dull ysgrifenedig estynedig
Lluosi rhifau 3 ddigid â rhifau 1 digid	4	Cownteri gwerth lle Bas 10	Dull ysgrifenedig byr
Lluosi rhifau 4 ddigid â rhifau 1 digid	5	Cownteri gwerth lle	Dull ysgrifenedig byr
Lluosi rhifau 2 ddigid â rhifau 2 ddigid	5	Cownteri gwerth lle Bas 10	Dull ysgrifenedig byr Dull Grid
Lluosi rhifau 2 ddigid â rhifau 3 digid	5	Cownteri gwerth lle	Dull ysgrifenedig byr Dull Grid
Lluosi rhifau 2 ddigid â rhifau 4 ddigid	5/6	Dull ysgrifenedig Dull Napier	



Skill	Year	Representation and model	
Solve one-step problems with multiplication	1/2	Bar Model Numicon Counters	Ten frames Bead strings Number Lines
Multiply 2-digit by 1-digit numbers	3/4	Place value counters Base 10	Short Written Method Expanded written method
Multiply 3-digit by 1-digit numbers	4	Place value counters Base 10	Short Written Method
Multiply 3-digit by 1-digit numbers	5	Place value counters	Short Written Method
Multiply 2-digit by 2-digit numbers	5	Place value counters Base 10	Short Written Method Grid Method
Multiply 2-digit by 3-digit numbers	5	Place value counters Grid Method	Short Written Method
Multiply 2-digit by 4-digit numbers	5/6	Formal written method Napier Method	

Datrys problemau un cam

One bag holds 5 apples.
How many apples do 4 bags hold?

$5 + 5 + 5 + 5 = 20$
 $4 \times 5 = 20$
 $5 \times 4 = 20$

Lluosi dau digid gyda un digid

$34 \times 5 = 170$

H	T	O
	3	4
x		5
<hr/>		
	2	0
x	1	5
<hr/>		
1	7	0

Lluosi tri digid gyda un digid

$245 \times 4 = 980$

H	T	O
	2	4
x		4
<hr/>		
	9	8
		0
<hr/>		
9	8	0

Lluosi pedwar digid gyda un digid

$1826 \times 3 = 5478$

Th	H	T	O
	1	8	2
x			3
<hr/>			
	5	4	7
			8
<hr/>			
5	4	7	8

Lluosi dau ddigid gyda dau ddigid

$22 \times 31 = 682$

H	T	O
	2	2
x	3	1
<hr/>		
	6	6
		2
<hr/>		
6	8	2

Lluosi tri digid gyda dau ddigid

$234 \times 32 = 7488$

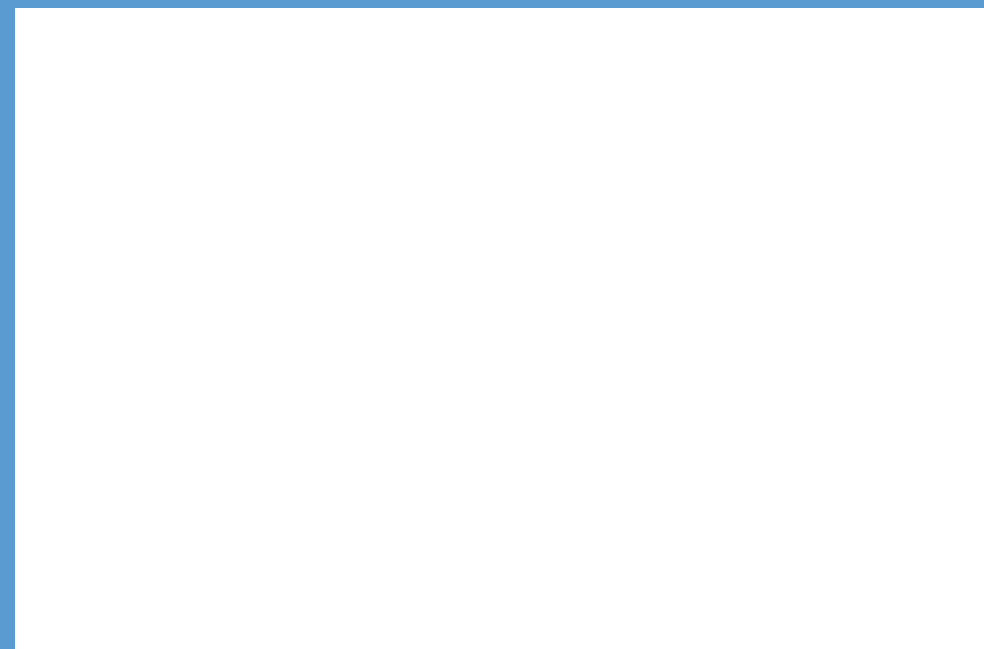
Th	H	T	O
	2	3	4
x		3	2
<hr/>			
	4	6	8
		2	0
<hr/>			
7	4	8	8

Lluosi pedwar digid gyda dau ddigid

$2739 \times 28 = 76692$

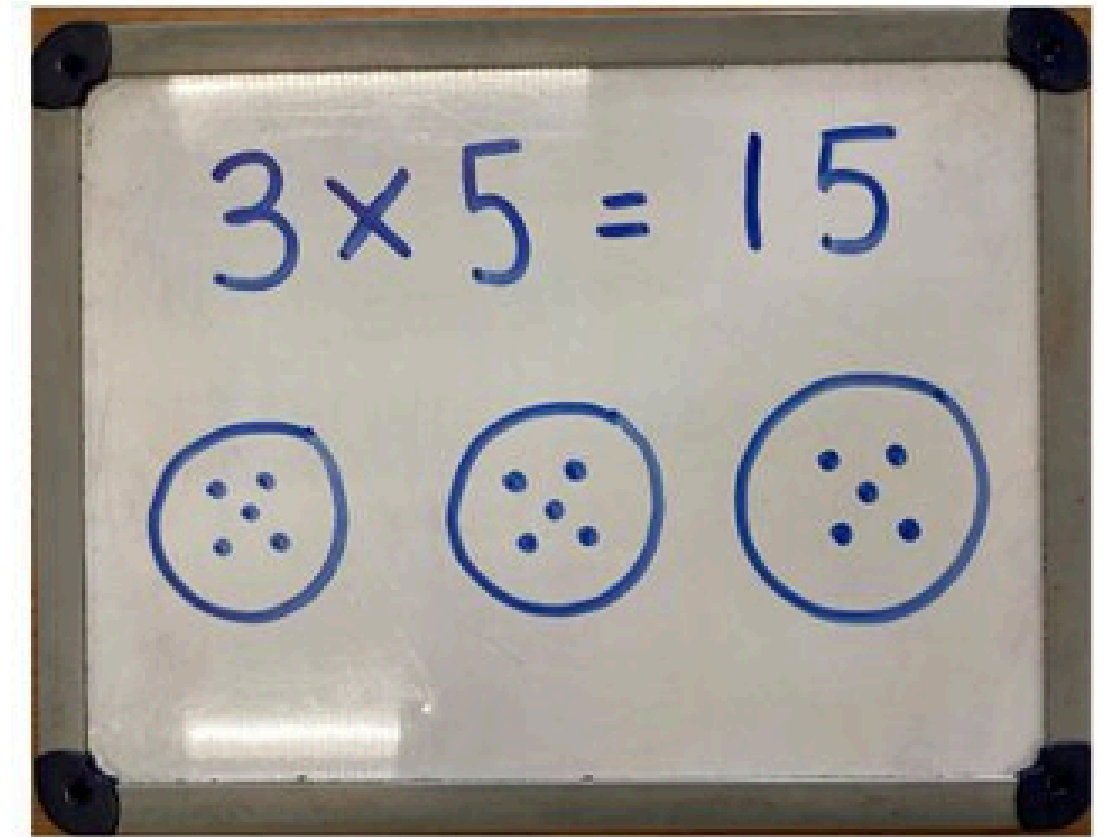
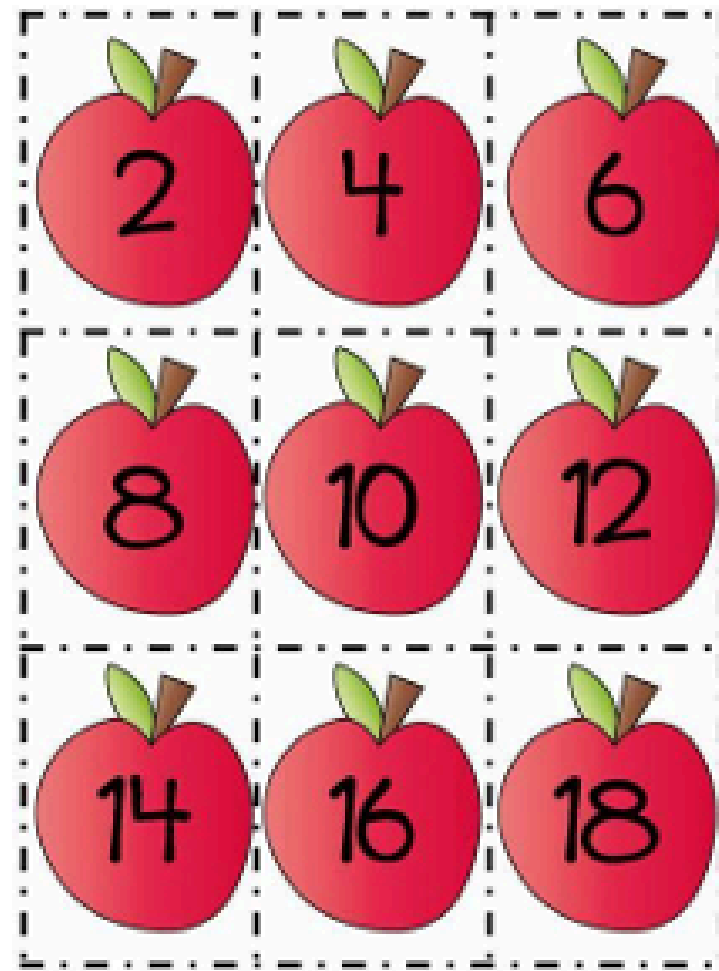
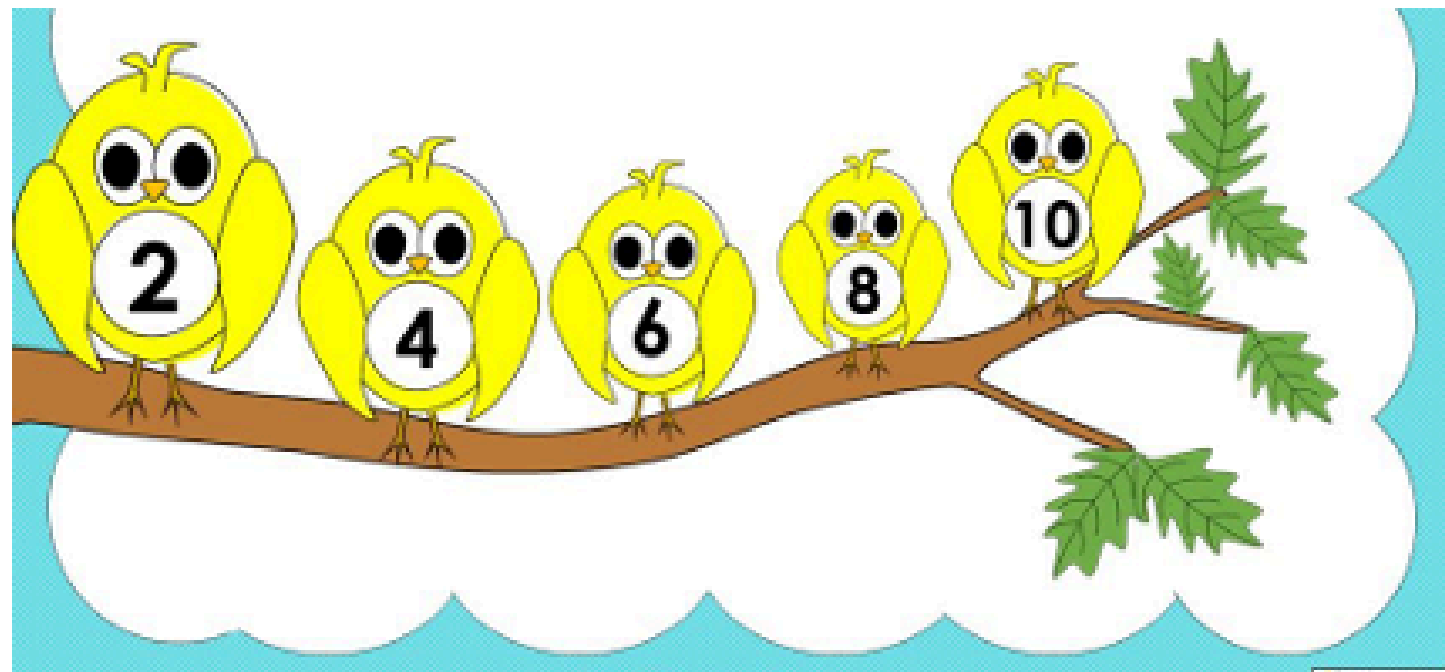
TTh	Th	H	T	O
		2	7	3
x			2	8
<hr/>				
	2	1	9	1
				2
<hr/>				
5	4	7	6	0
				2
<hr/>				
7	6	6	9	2

Dull Napier



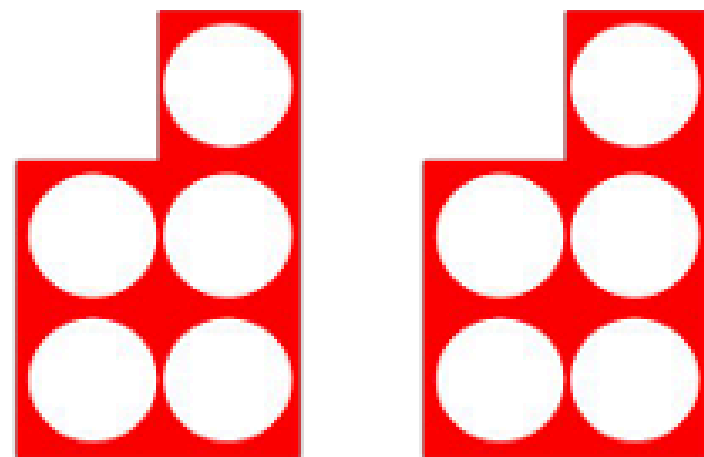
1 digid x 1 digid

Sgiliau lluosu cynnar
- cyfri fesul 2, 5 a 10

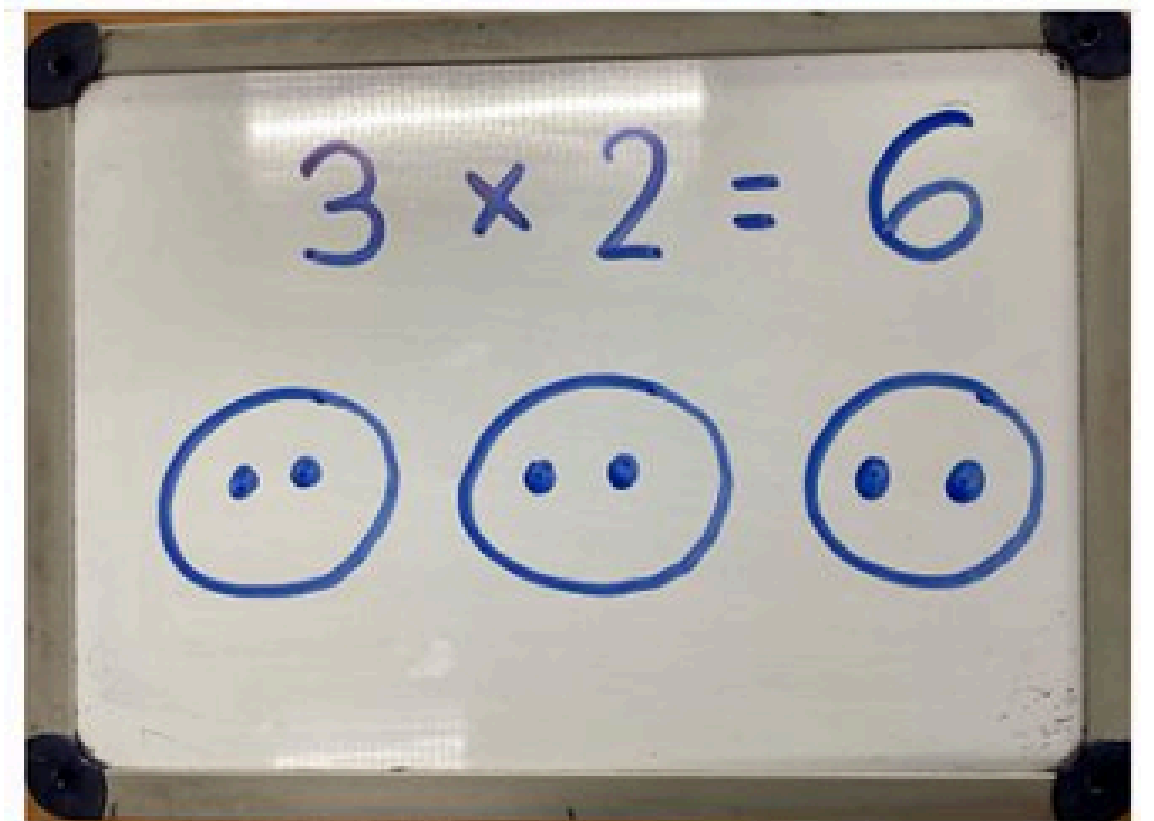


Defnyddio platiau
numicon

$$2 \times 5 = 10$$

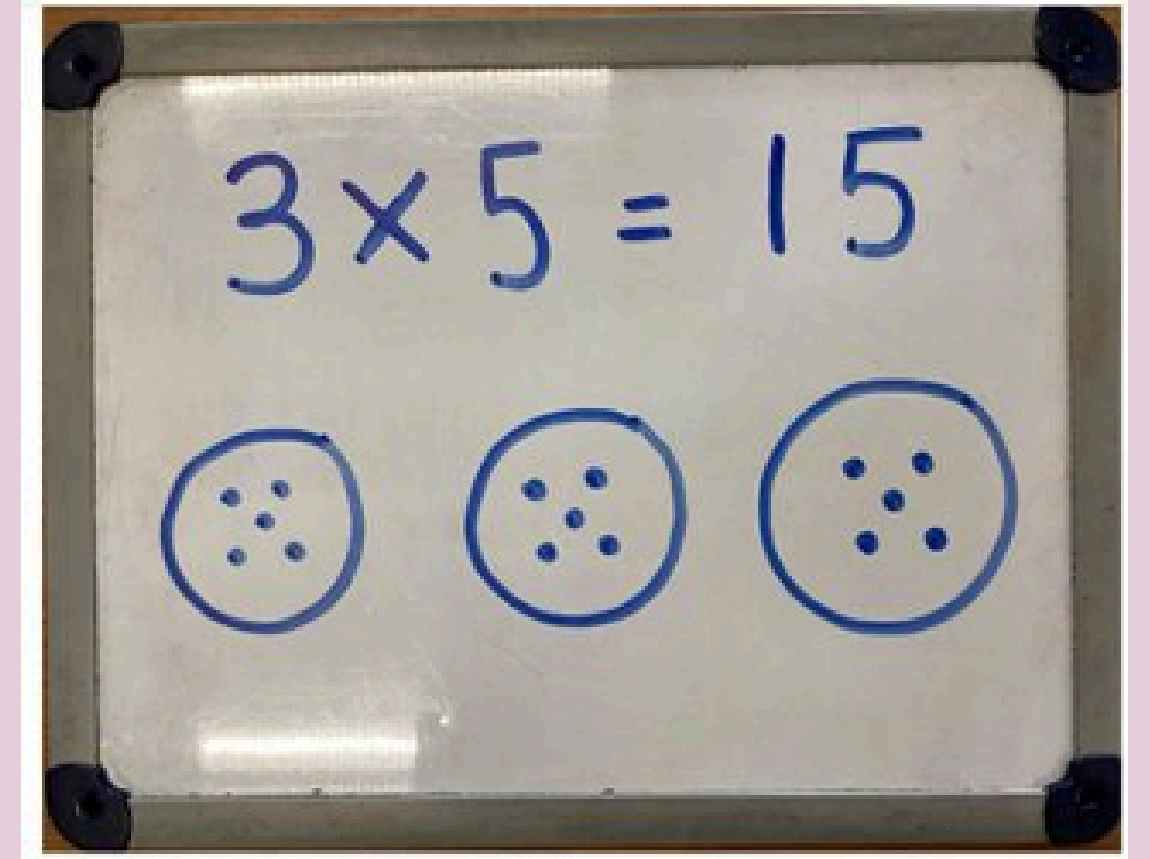
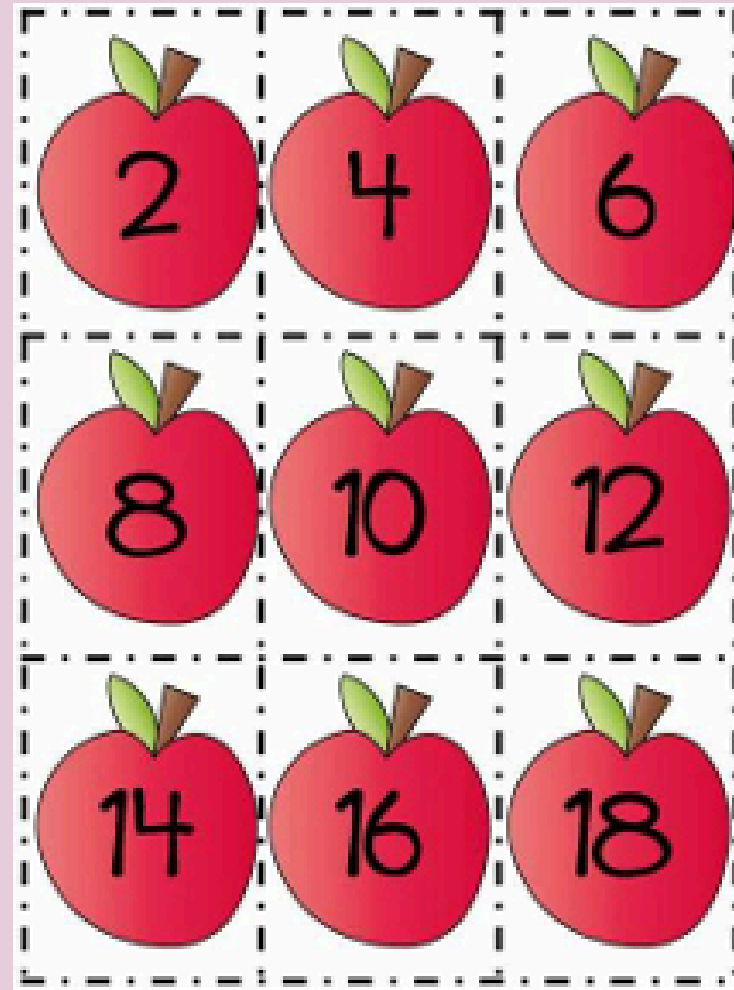
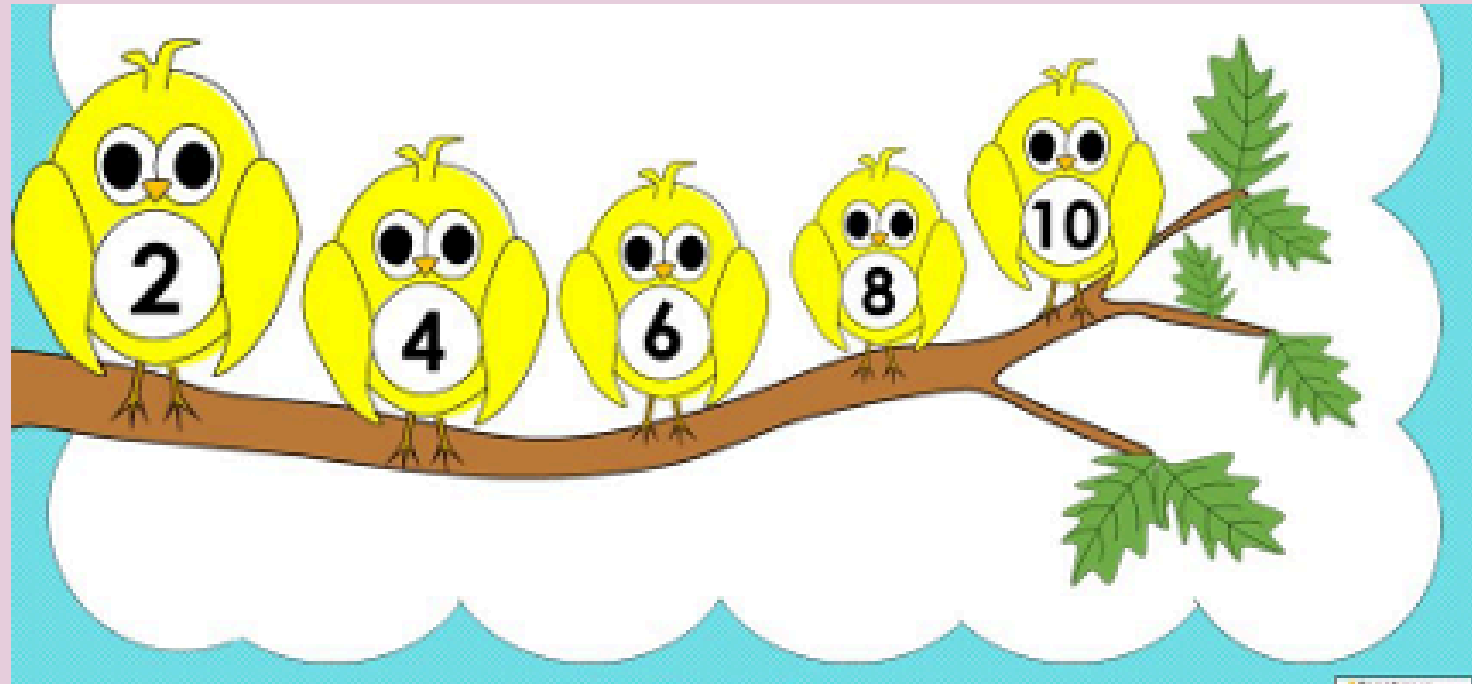


Defnyddio
cylchoedd a
smotiau
yna eu cyfri
i gael y
cyfanswm.



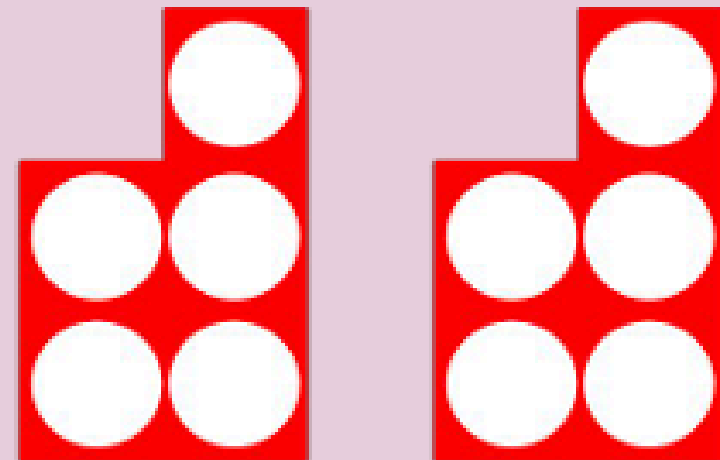
1 digit x 1 digit

Early multiplication skills - count in 2's, 5's and 10's, then arrange numbers in 2's, 5's and 10's

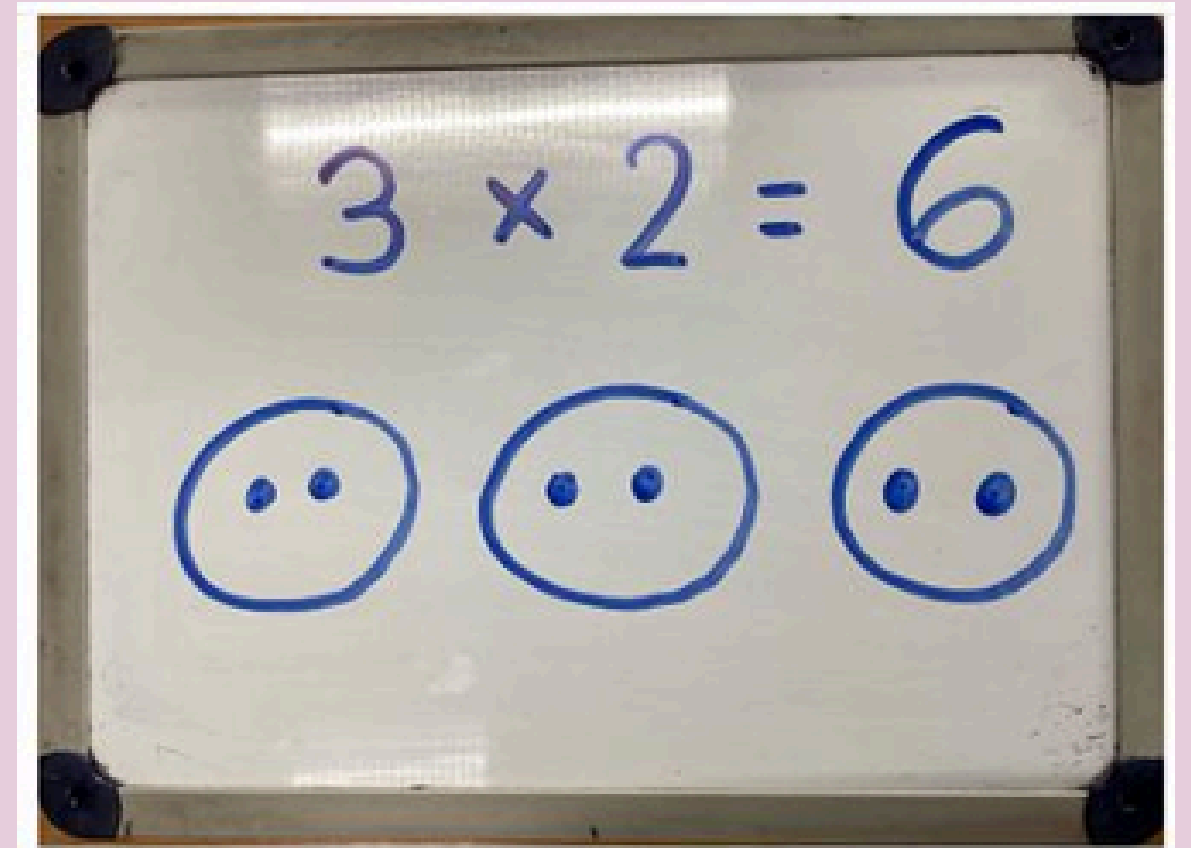


Use Numicon plates

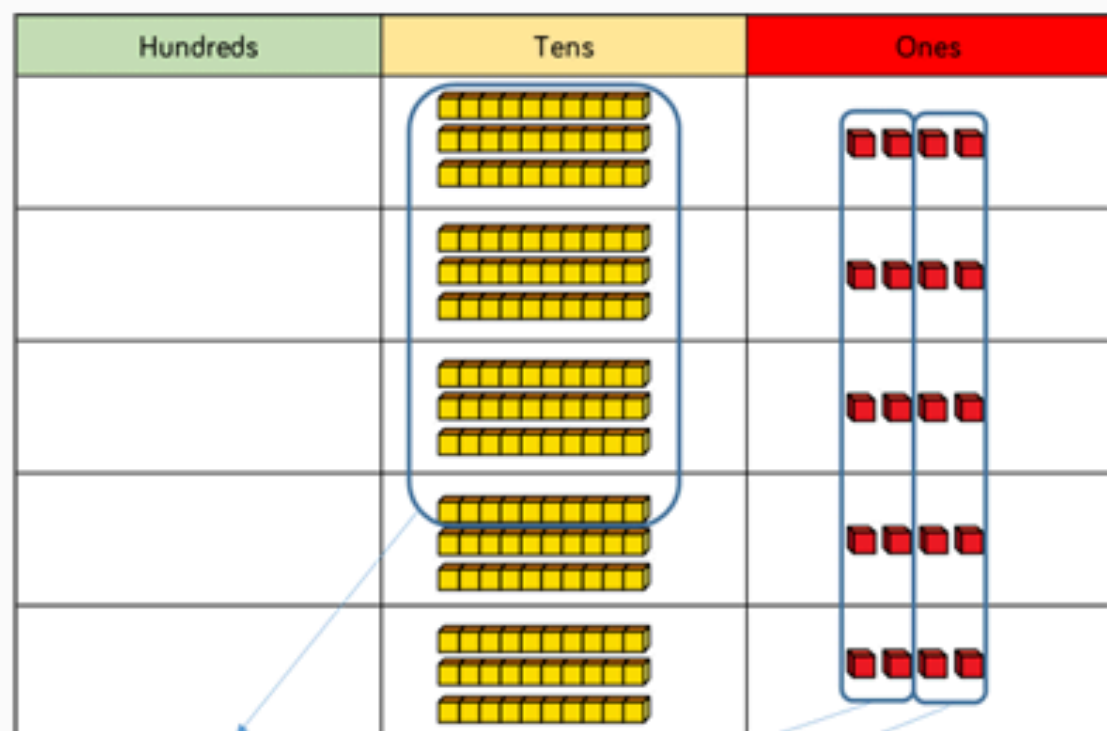
$$2 \times 5 = 10$$



Use circles and spots. Count them to get the correct amount.



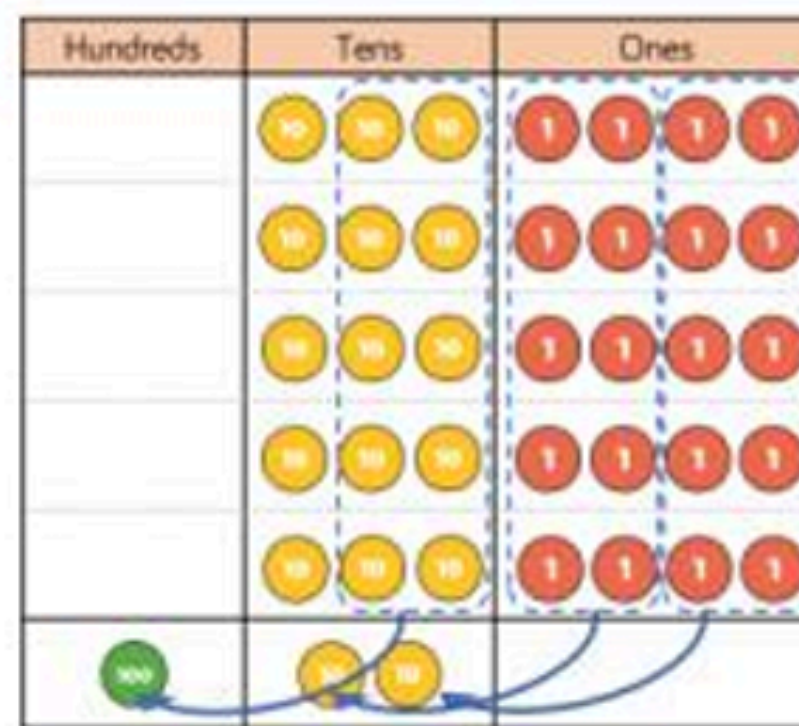
Lluosi 2 digid gyda 1 digid/ Multiply 2 digits by 1 digit



	H	T	O	
		3	4	
x			5	
		2	0	(5 x 4)
+	1	5	0	(5 x 30)
	1	7	0	

$$34 \times 5 = 170$$

	H	T	O	
		3	4	
x			5	
	1	7	0	
	1	2		



Dull Lluosi Napier



Gallai'r dull yma weithio ar gyfer unrhyw nifer o ddigidau felly addaswch fel y mynnwch.

	2	4	X
			3

Cam 1:
Gosod y rhifau fel bod un rhif i bob bocs ar draws ac am i lawr.

Cam 2:
Gosod llinellau lletraws o gornel dde pob bocs hyd at cornel gwylod chwith y bocs.

	2	4	X
		1	3
			2

Cam 3:
Lluosi'r rhifau at ei gilydd gan gymryd fod pob rhif yn uned.

Cam 4:
Gosod yr ateb bob ochr i'r llinell lletraws.

Cam 5:
Sicrhau bod un uned i bob triongl bach.

	2	4	X
	0	1	3
	6		2

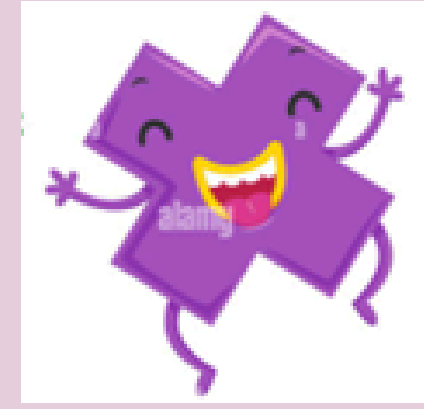
	2	4	X
0	0	1	3
	6	2	
	7	2	

Cam 6:
Ychwanegu'r cyfanswm ar hyd y llinellau lletraws.

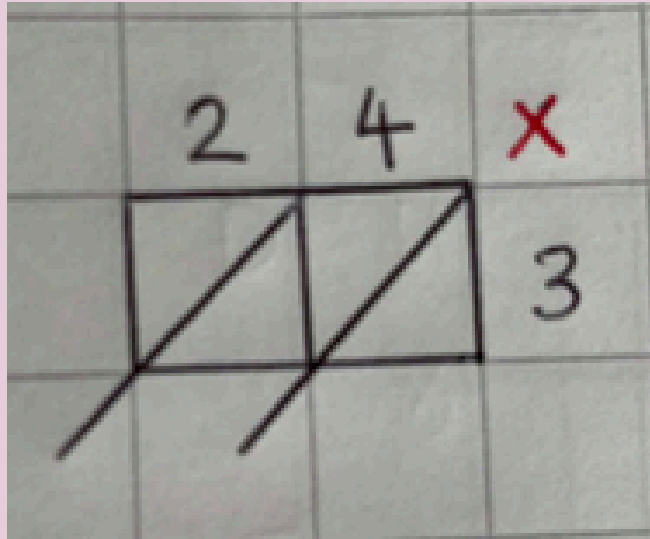
Cam 7:
Os mae'r cyfanswm ar hyd y llinellau lletraws yn fwy na 9; bydd rhaid cario'r deg i'r golofn nesaf.

**Ond cofiwch, rydych yn adio'r 'deg' fel uned; felly 1.

Multiplication Napier Method

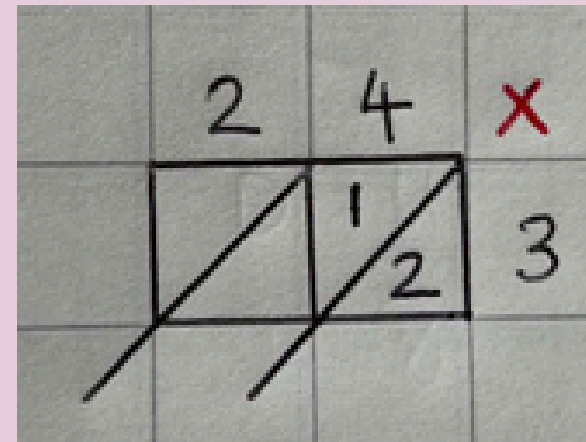


This method can work for any amount of digits so you can adapt as necessary.



Step 1:
Place numbers so that each box has a number across and downwards.

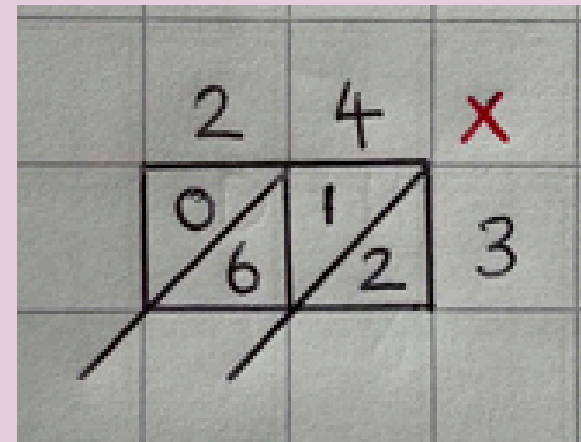
Step 2:
Draw lines across from the right corner of each box to the bottom left corner.



Step 3:
Multiply the numbers treating each number as units.

Step 4:
Place the answer either side of the line.

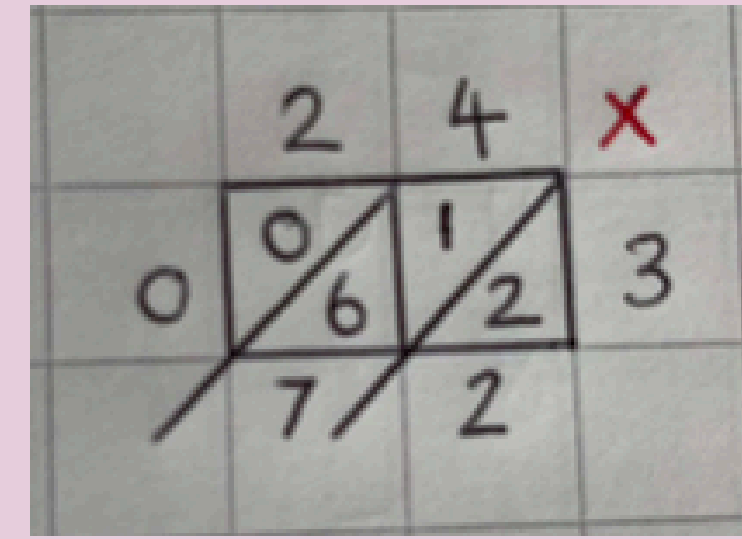
Step 5:
Ensure each small triangle has a unit.



Step 6:
Place the amount at the bottom.

Step 7:
If the amount is more than 9 you will need to carry the ten to the next column.

**But remember you will add the 'ten' as a unit so 1.



x10, x100, x1000

$146 \times 10 = 1460$

M	C	D	U
	1	4	6
1	4	6	0

$146 \times 1000 = 146,000$

CM	DM	M	C	D	U
			1	4	6
1	4	6	0	0	0

Os mae un sero mewn 10; rydych yn symud y rhifau i fyny unwaith. Os mae dau sero mewn 100; rydych yn symud y rhifau fyny dwy waith ayyb.

Tablau/ Times Tables

	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100



Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 2	2	Model Bar Numicon Cownteri Arian	Fframiau 10 Llinyn gleiniau Llinellau Rhif Gwrthrychau bob dydd
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 5	2	Model Bar Numicon Cownteri Arian	Fframiau 10 Llinyn gleiniau Llinellau Rhif Gwrthrychau bob dydd
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 10	2	Model Bar Numicon Cownteri Arian	Fframiau 10 Llinyn gleiniau Llinellau Rhif Bas 10



Skill	Year	Representations and models	
Recall and use multiplication and division facts for the 2-times table	2	Bar model Number shapes Counters Money	Ten frames Bead strings Number lines Everyday objects
Recall and use multiplication and division facts for the 5-times table	2	Bar model Number shapes Counters Money	Ten frames Bead strings Number lines Everyday objects
Recall and use multiplication and division facts for the 10-times table	2	Hundred square Number shapes Counters Money	Ten frames Bead strings Number lines Base 10



Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Dwyn i gof a defnyddio ffeithiau llusoi a rhannu ar gyfer tabl 3	3	Sgwar 100 Numicon Cownteri	Llinyn gleiniau Llinellau Rhif Gwrthrychau bob dydd
Dwyn i gof a defnyddio ffeithiau llusoi a rhannu ar gyfer tabl 4	3	Sgwar 100 Numicon Cownteri	Llinyn gleiniau Llinellau Rhif Gwrthrychau bob dydd
Dwyn i gof a defnyddio ffeithiau llusoi a rhannu ar gyfer tabl 8	3	Sgwar 100 Numicon Cownteri	Llinyn gleiniau Traciau Rhif Gwrthrychau bob dydd
Dwyn i gof a defnyddio ffeithiau llusoi a rhannu ar gyfer tabl 6	4	Sgwar 100 Numicon	Llinyn gleiniau Traciau Rhif Gwrthrychau bob dydd



Skill	Year	Representations and models	
Recall and use multiplication and division facts for the 3-times table	3	Hundred square Number shapes Counters	Bead strings Number lines Everyday objects
Recall and use multiplication and division facts for the 4-times table	3	Hundred square Number shapes Counters	Bead strings Number lines Everyday objects
Recall and use multiplication and division facts for the 8-times table	3	Hundred square Number shapes	Bead strings Number tracks Everyday objects
Recall and use multiplication and division facts for the 6-times table	4	Hundred square Number shapes	Bead strings Number tracks Everyday objects



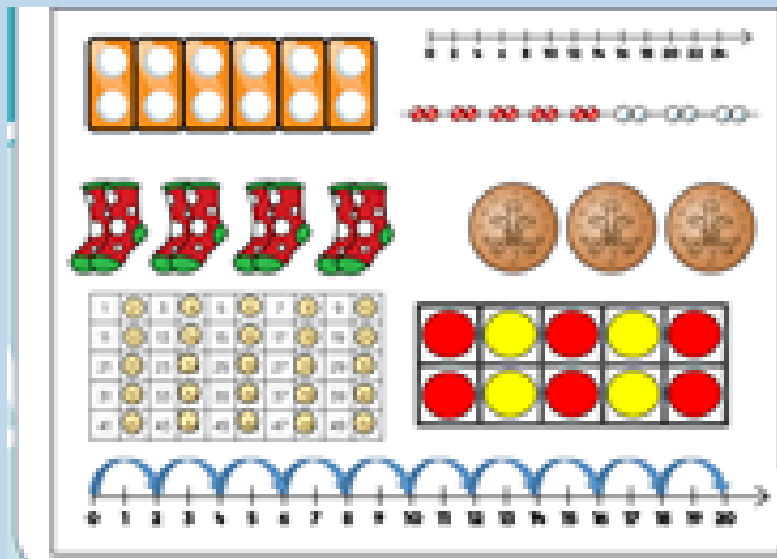
Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 7	4	Sgwar 100 Numicon	Llinyn gleiniau Llinellau Rhif
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 9	4	Sgwar 100 Numicon	Llinyn gleiniau Llinellau Rhif
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 11	4	Sgwar 100 Bas 10	Cownteri Gwerth Lle Llinellau Rhif
Dwyn i gof a defnyddio ffeithiau lluosu a rhannu ar gyfer tabl 12	4	Sgwar 100 Bas 10	Cownteri Gwerth Lle Llinellau Rhif



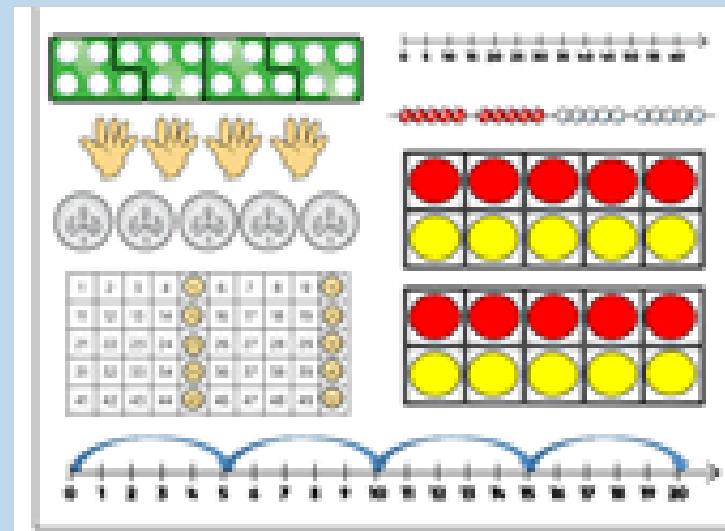
Skill	Year	Representations and models	
Recall and use multiplication and division facts for the 7-times table	4	Hundred square Number shapes	Bead strings Number lines
Recall and use multiplication and division facts for the 9-times table	4	Hundred square Number shapes	Bead strings Number lines
Recall and use multiplication and division facts for the 11-times table	4	Hundred square Base 10	Place value counters Number lines
Recall and use multiplication and division facts for the 12-times table	4	Hundred square Base 10	Place value counters Number lines



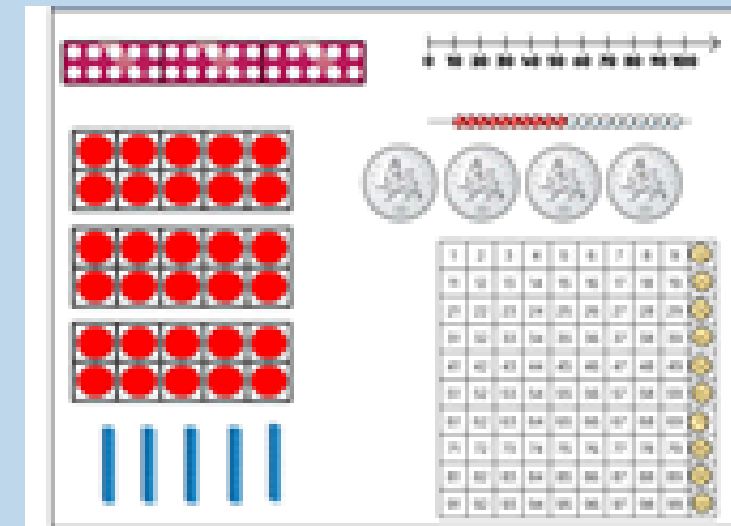
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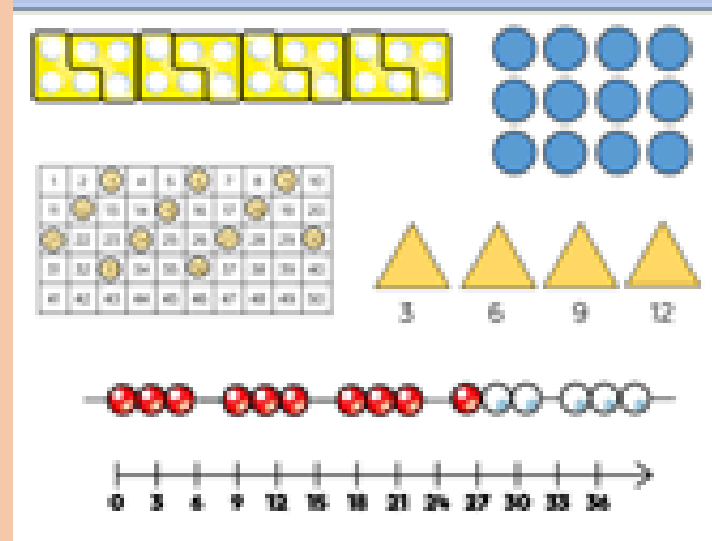
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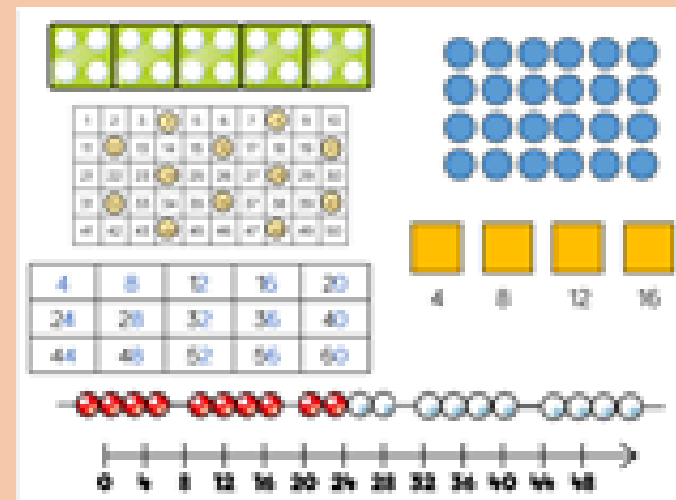
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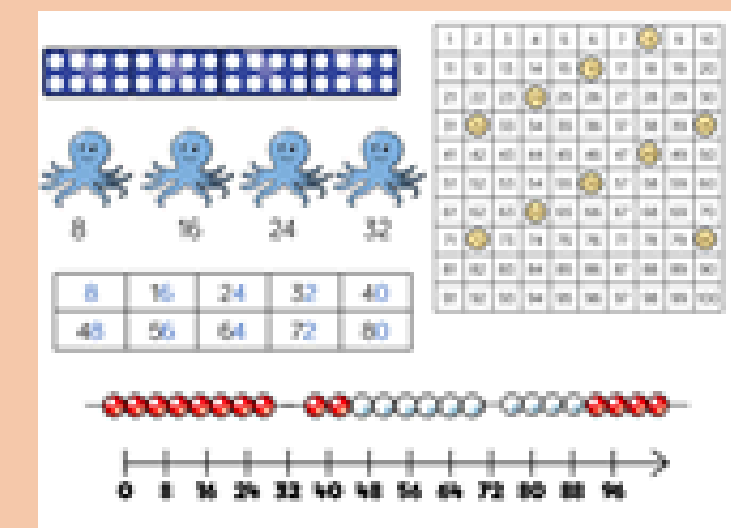
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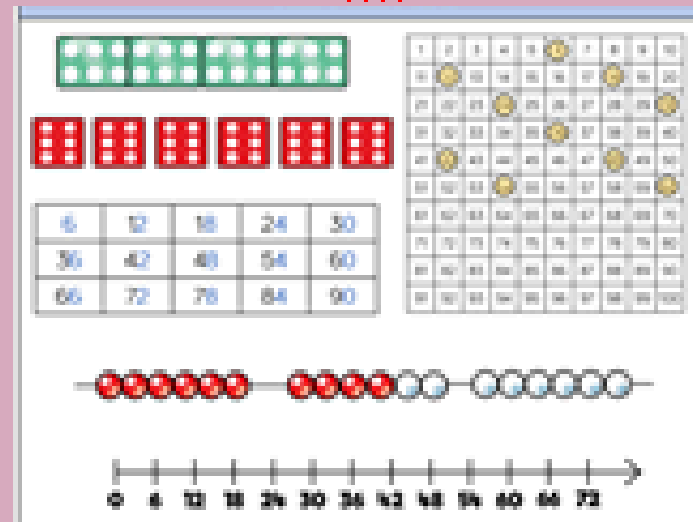
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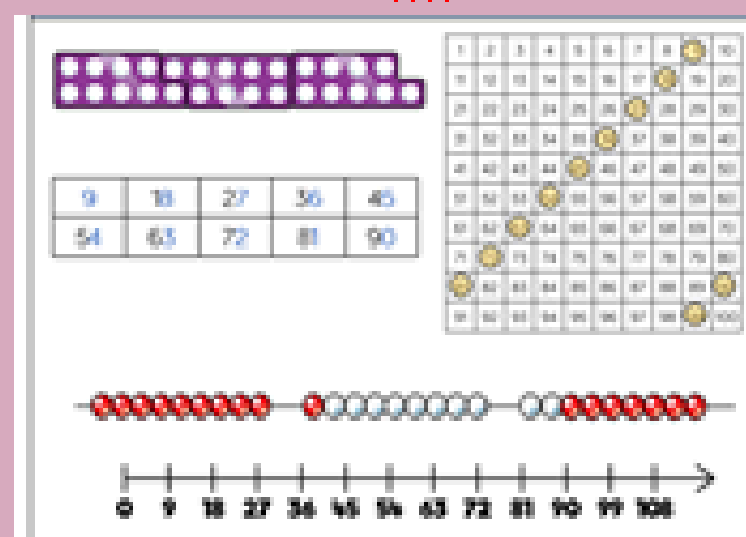
Tabl 8



Tabl 6

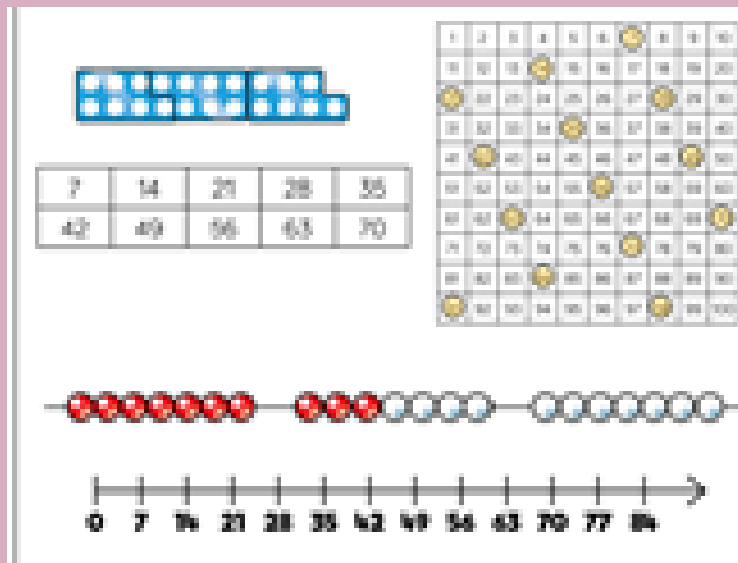


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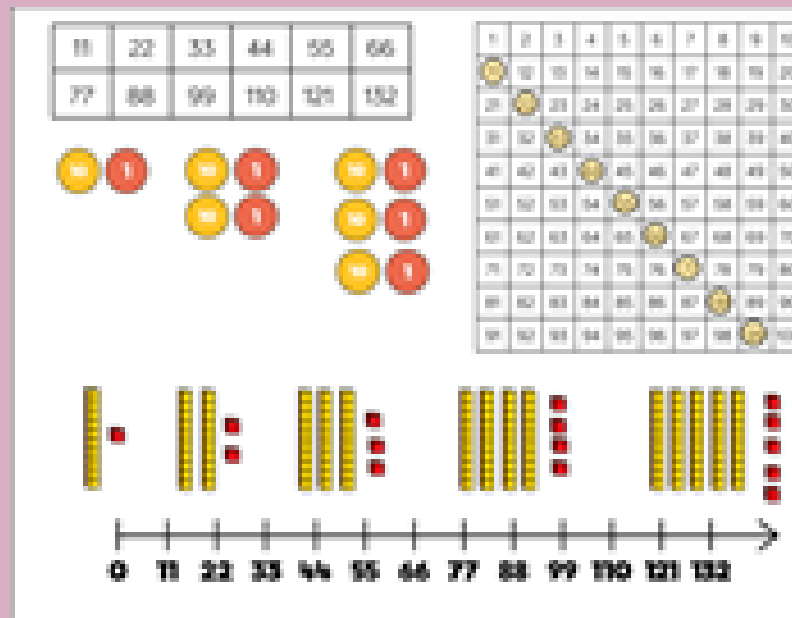




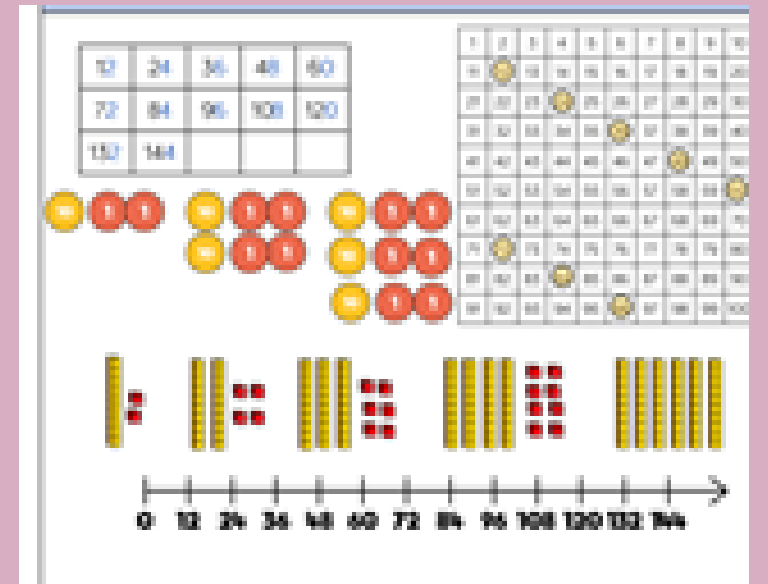
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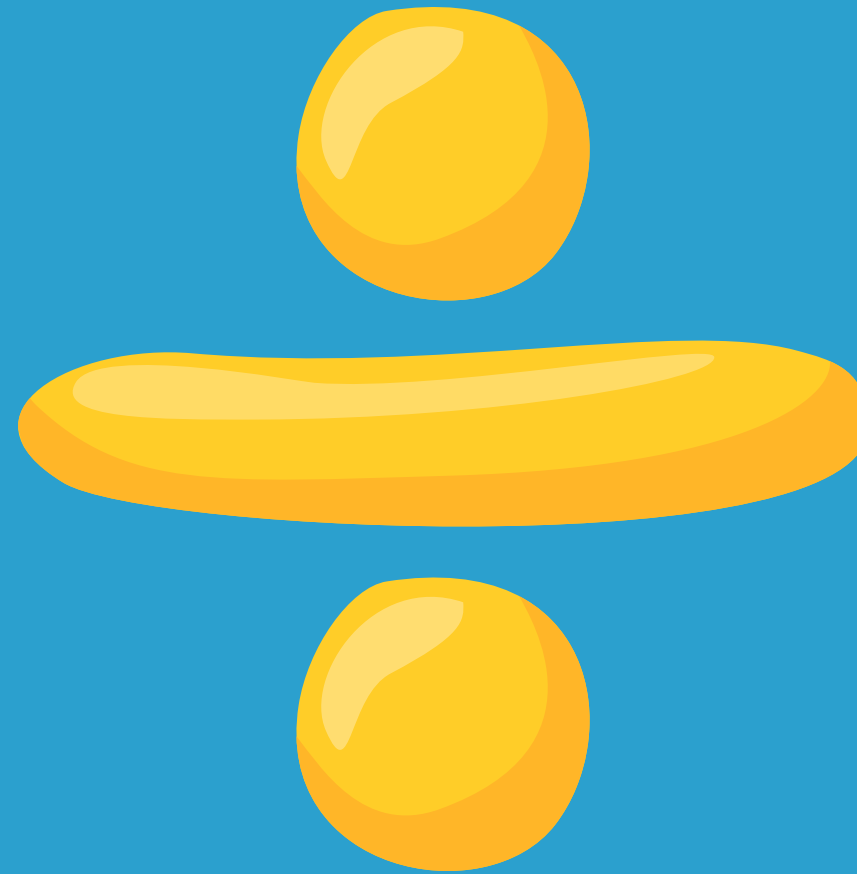
Tabl 11



Tabl 12



Rhannu/ Division





Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Datrys problemau un cam gyda rhannu	1/2	Model bar Gwrthrychau bob dydd Cownteri	
Datrys problemau un cam gyda rhannu (grwpio)	1/2	Gwrthrychau bob dydd Numicon Llinynau gleiniau	Cownteri Llinellau Rhif Fframiau 10
Rhannu 2 ddigid ag un digid (dim cyfnewid)	3	Gwellt Bas 10 Model Bar	Cownteri Gwerth Lle Model Rhan-Cyfan
Rhannu 2 ddigid ag un digid (gyda chyfnewid)	3	Gwellt Bas 10	Cownteri Gwerth Lle Model Rhan-Cyfan Model Bar

Skill	Year	Representations and models
Solve one-step problems with division (sharing)	1/2	Bar model Real life objects Arrays Counters
Solve one-step problems with division (grouping)	1/2	Real life objects Number shapes Bead strings Ten frames Number lines Arrays Counters
Divide 2-digits by 1-digit (no exchange sharing)	3	Straws Base 10 Bar model Place value counters Part-whole model
Divide 2-digits by 1-digit (sharing with exchange)	3	Straws Base 10 Bar model Place value counters Part-whole model

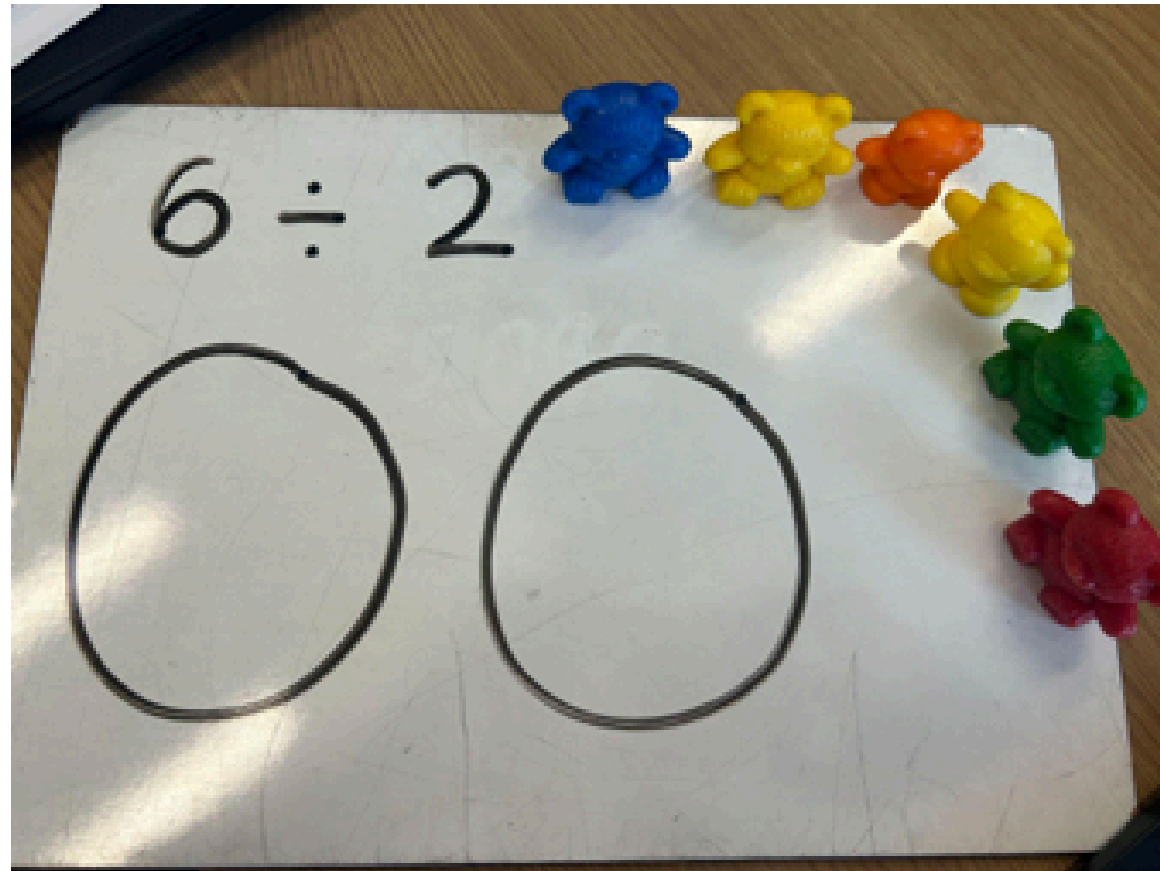


Sgil	Blwyddyn	Cynrychiolaeth a Modelau	
Rhannu rhifau 2 ddigid gyda rhifau 1 digid (rhannu gyda gweddill)	3/4	Gwellt Bas 10	Cownteri Gwerth Lle Model Rhan-Cyfan Model Bar
Rhannu rhifau 2 ddigid gyda rhifau 1 digid (grwpio)	4/5	Cownteri Gwerth Lle Cownteri	Grid Gwerth Lle Rhannu byr ysgrifenedig
Rhannu rhifau 3 digid ag un digid (rhannu a chyfnewid)	4	Bas 10 Model Bar	Cownteri Gwerth Lle Model Rhan-Cyfan
Rhannu 3 digid ag un digid (grwpio)	4/5	Cownteri Gwerth Lle Cownteri	Grid Gwerth Lle Rhannu byr ysgrifenedig
Rhannu 4 digid ag un digid (grwpio)	5	Cownteri Gwerth Lle Cownteri	Grid Gwerth Lle Rhannu byr ysgrifenedig
Rhannu aml-ddigid â 2 ddigid (Rhannu byr)	6		Rhannu byr ysgrifenedig Rhestr o luosrifau
Rhannu aml-ddigid â 2 ddigid (Rhannu hir)	6		Rhannu hir ysgrifenedig Rhestr o luosrifau



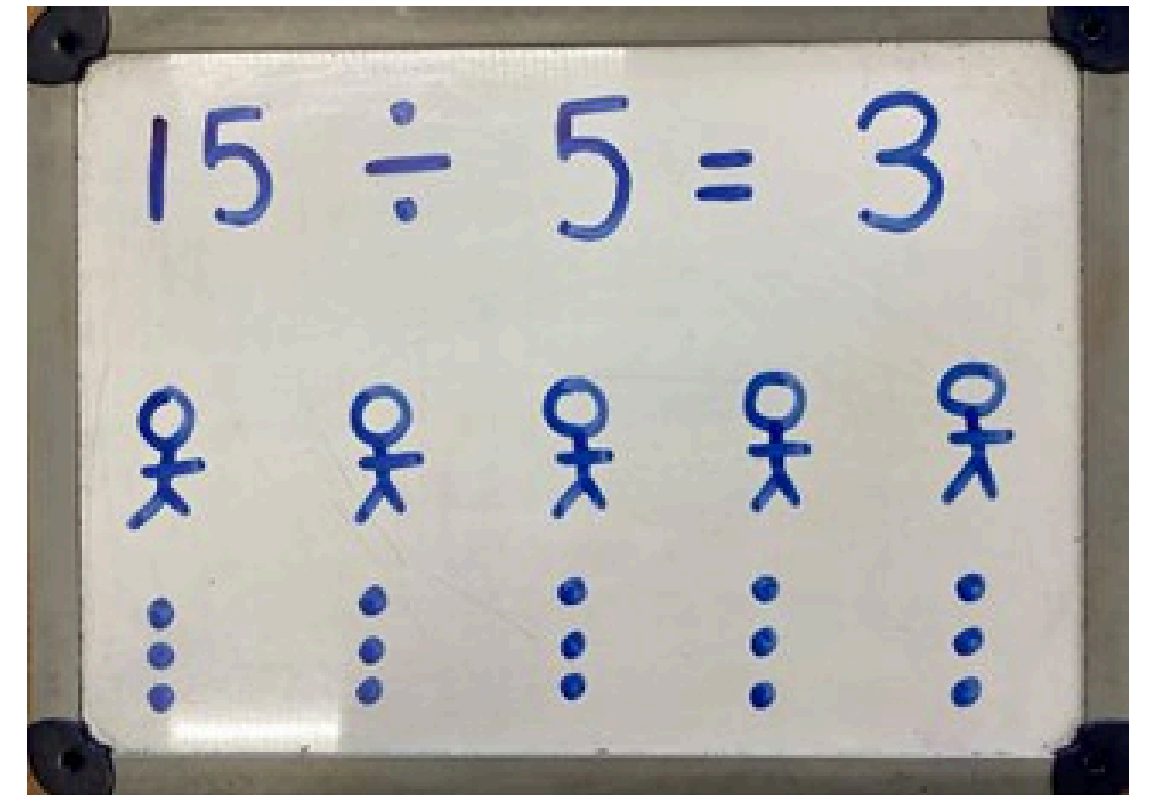
Skill	Year	Representation and model	
Divide 2 digits by 1 digit (sharing with remainders)	3/4	Straws Base 10 Bar Model	Place value counters Part Whole Model
Divide 2 digits by 1 digits (grouping)	4/5	Place value counters Counters	Place value grid Written short division
Divide 3 digits by 1 digit (sharing with exchange)	4	Base 10 Bar Model	Place value counters Part Whole Model
Divide 3 digits by 1 digit (grouping)	4/5	Place value counters Counters	Place value grid Written short division
Divide 4 digits by 1 digit (grouping)	5	Place value counters Counters	Place value grid Written short division
Divide multi digits by 2 digits (short division)	6		Written long division List of multiples
Divide multi-digits by 2 digits (long division)	6		Written long division List of multiples

Rhannu

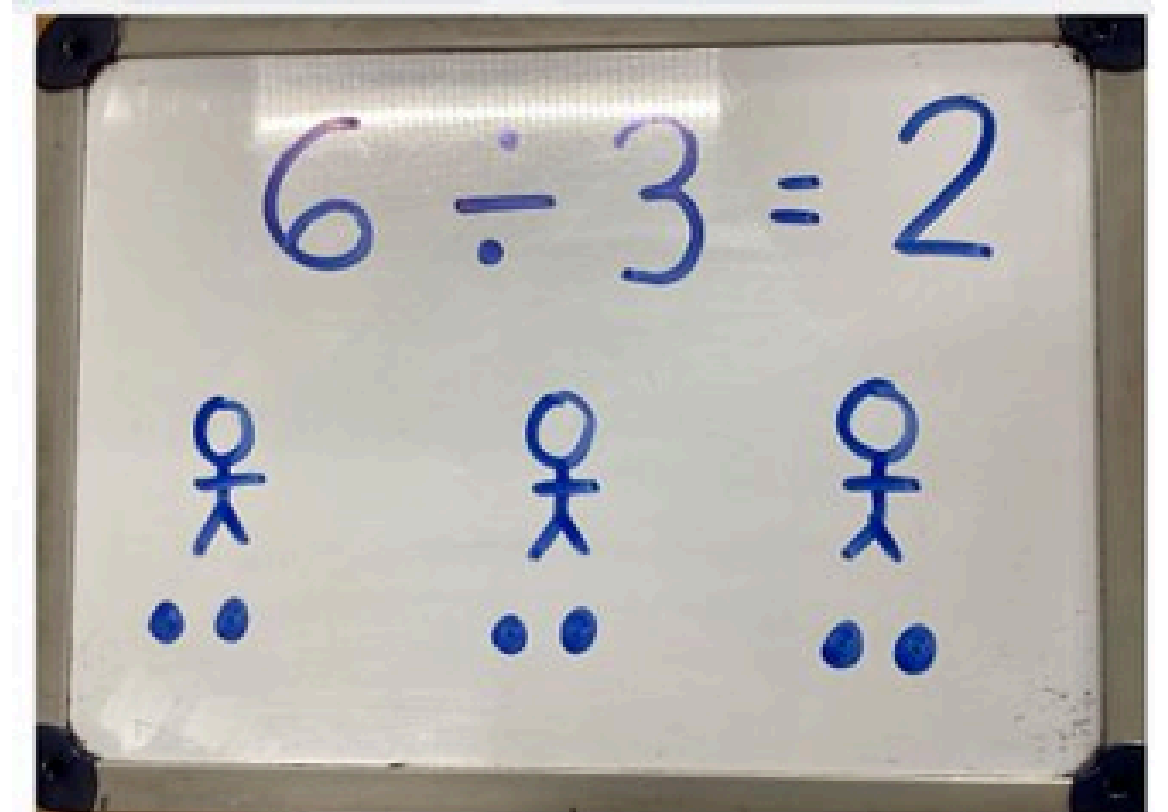
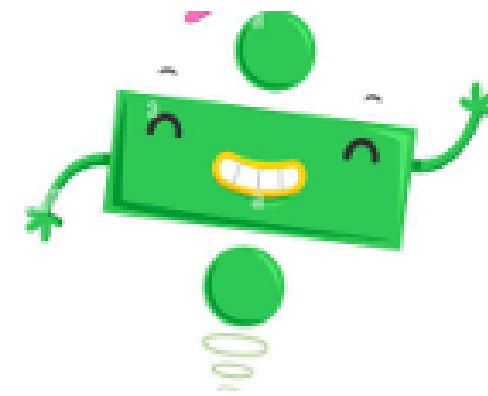
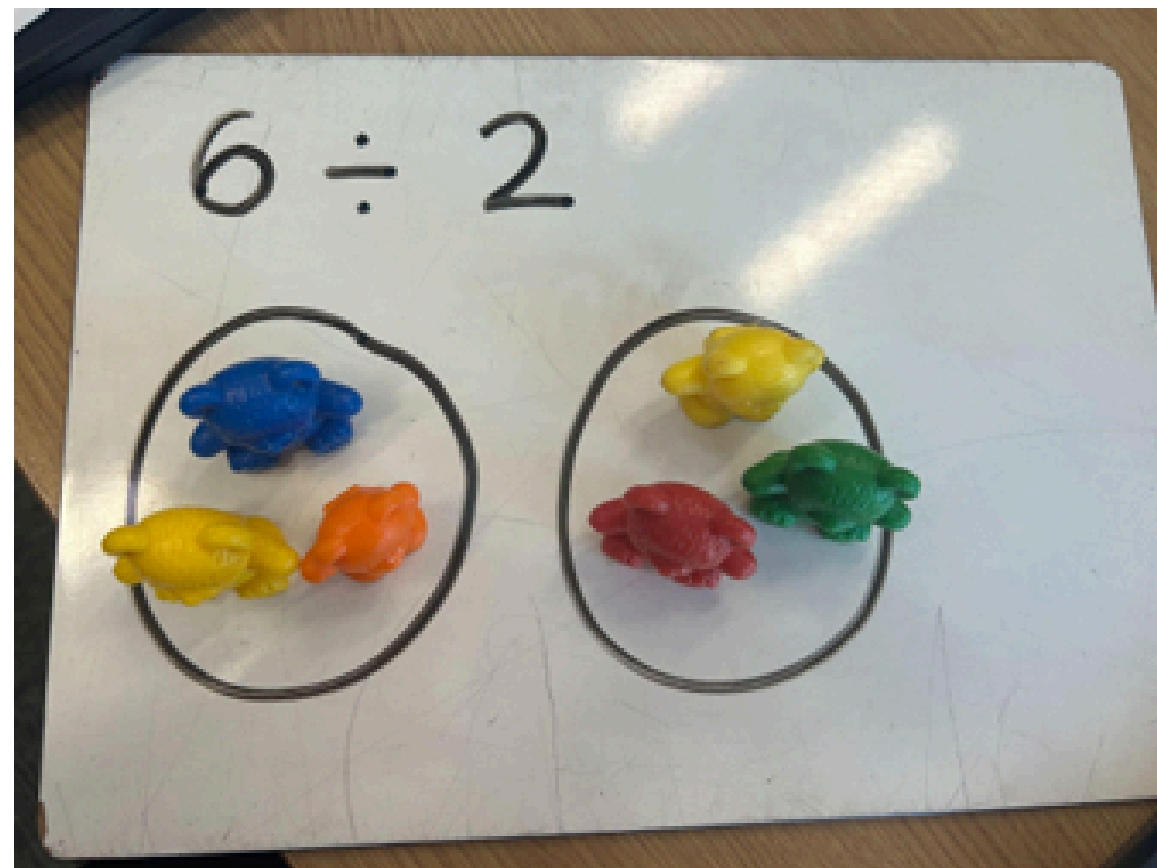


Defnyddio
byrddau
gwyn a
smotiau.

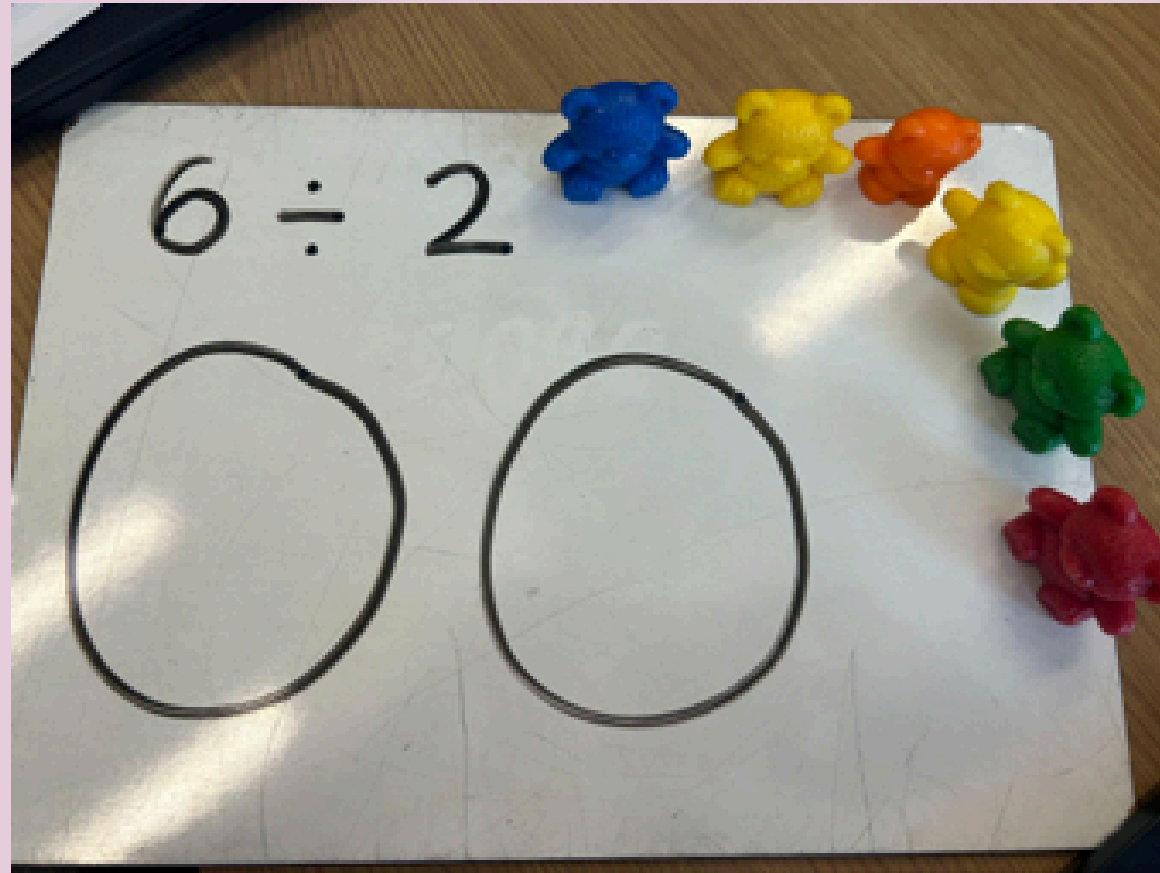
6 rhannu gyda 2
yn hafal i



Defnyddio
gwrthrychau
a cylchoedd.

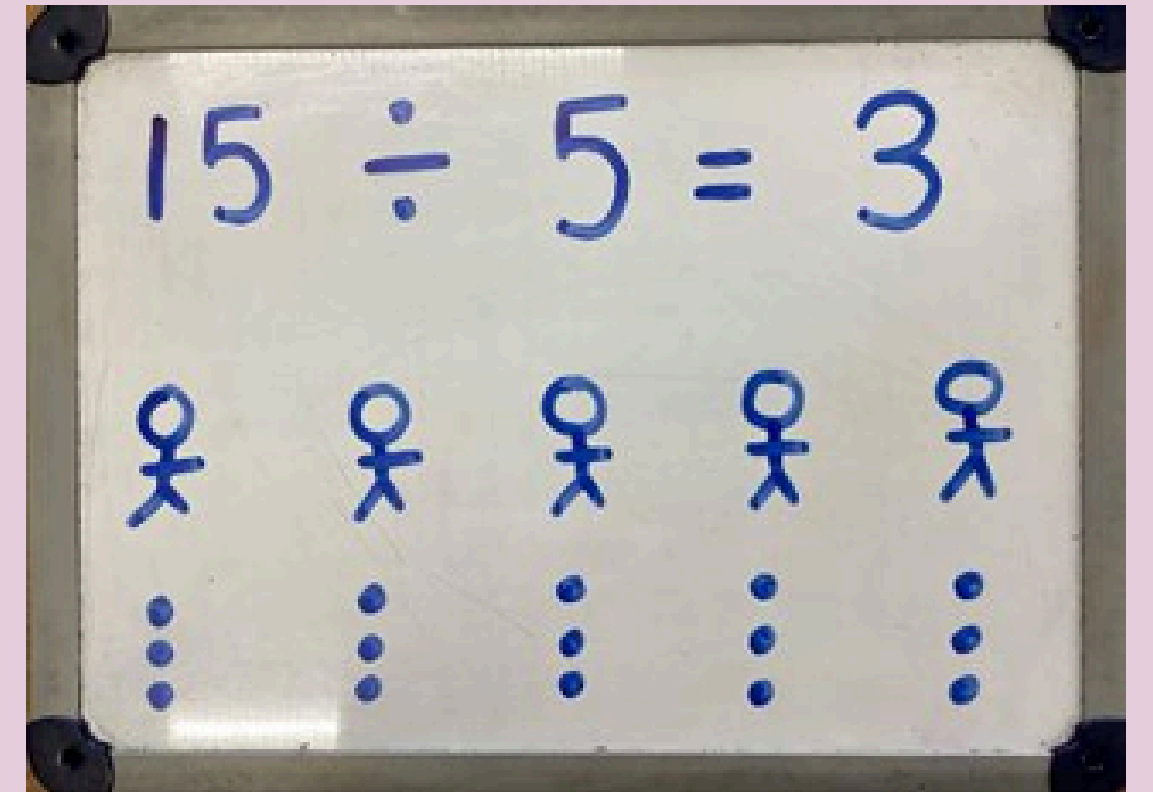


Division

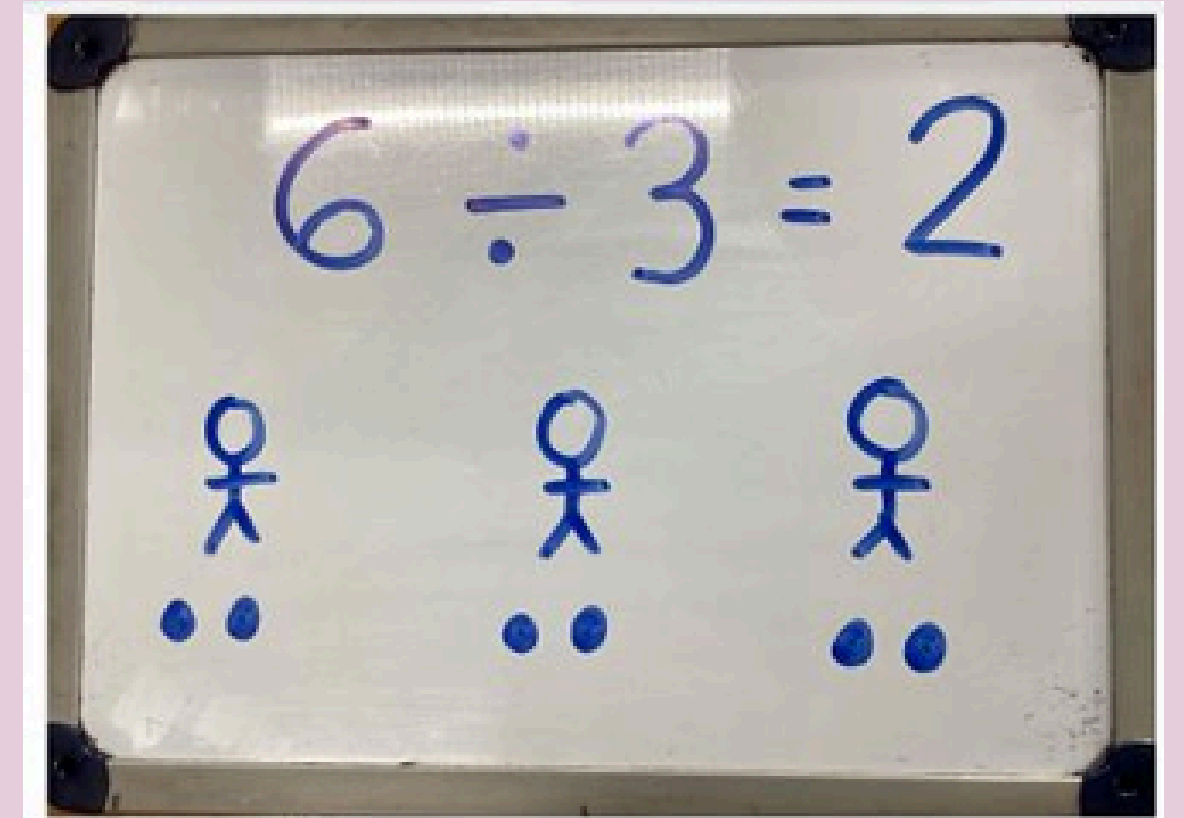
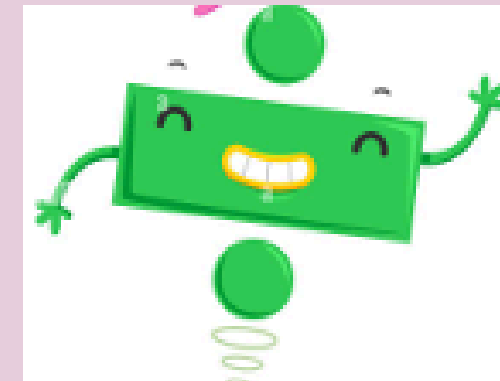
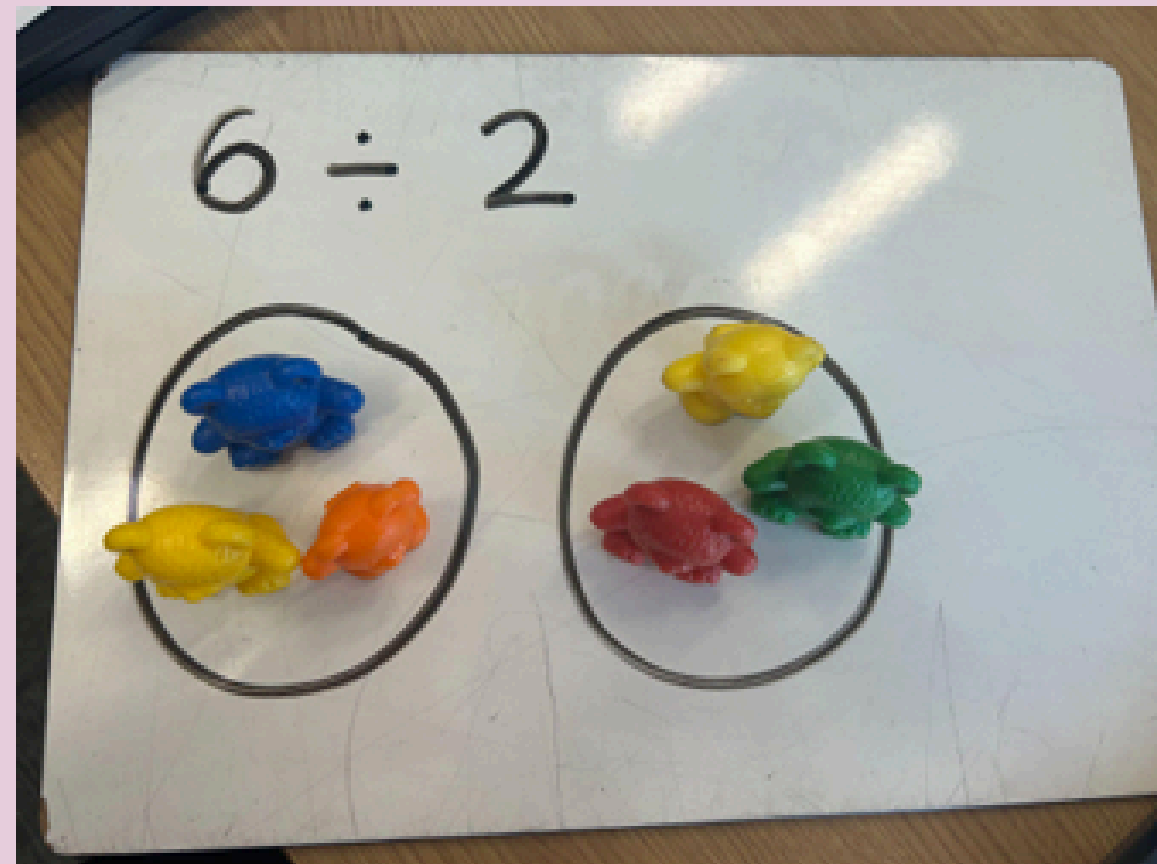


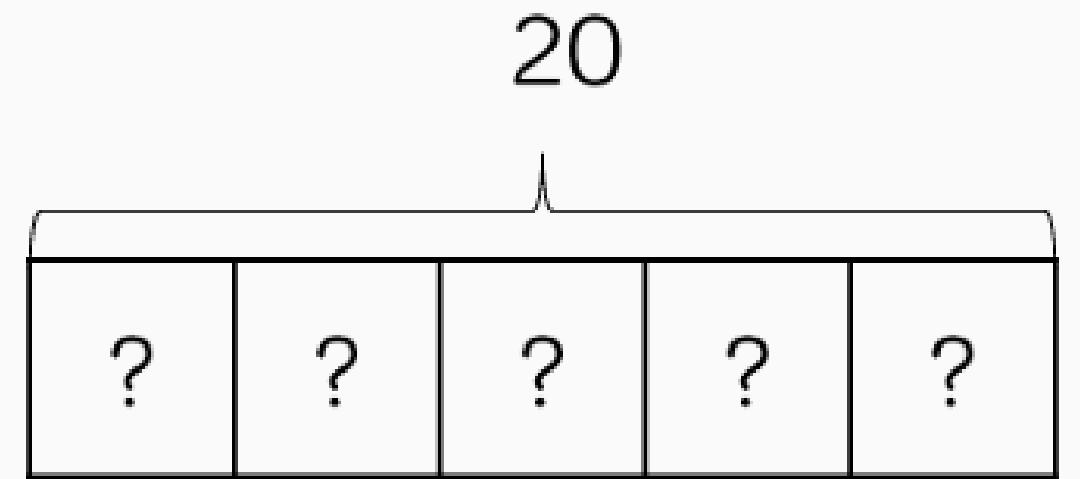
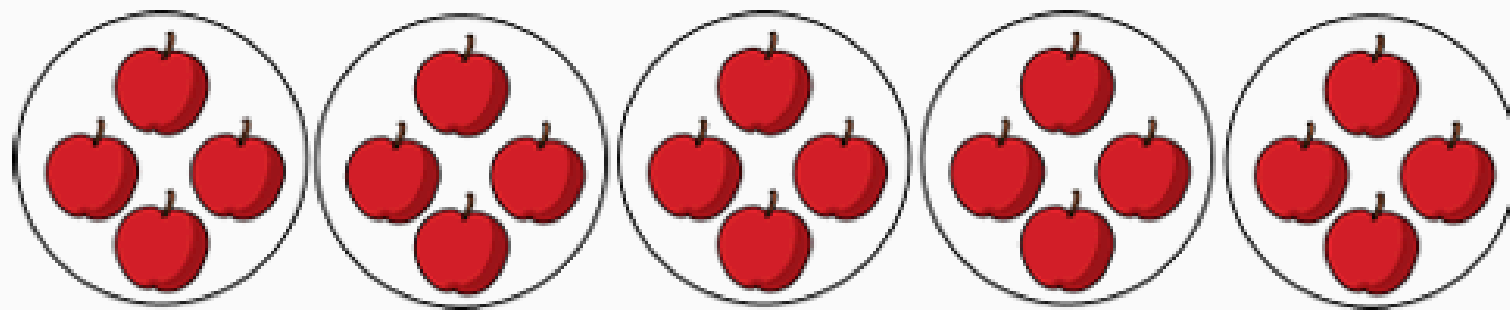
6 divide by 2 equals

Use white boards and spots.

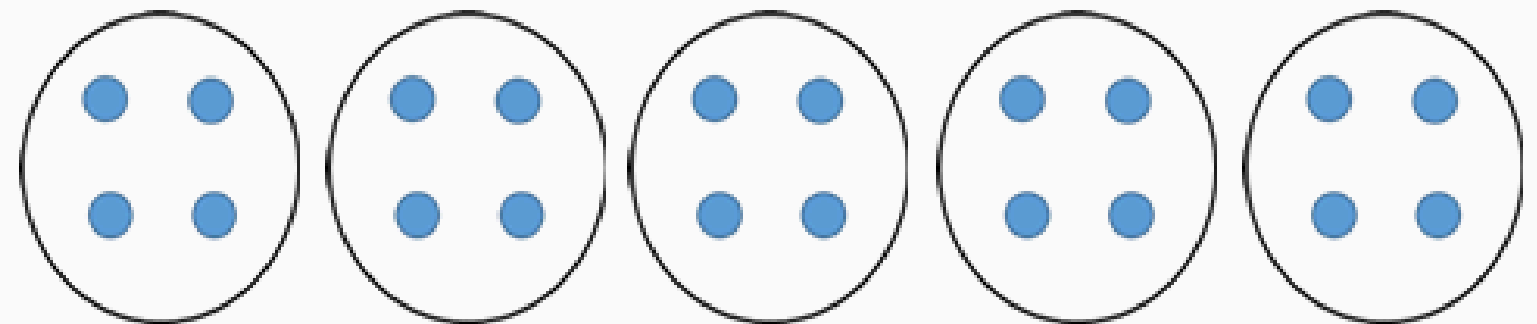
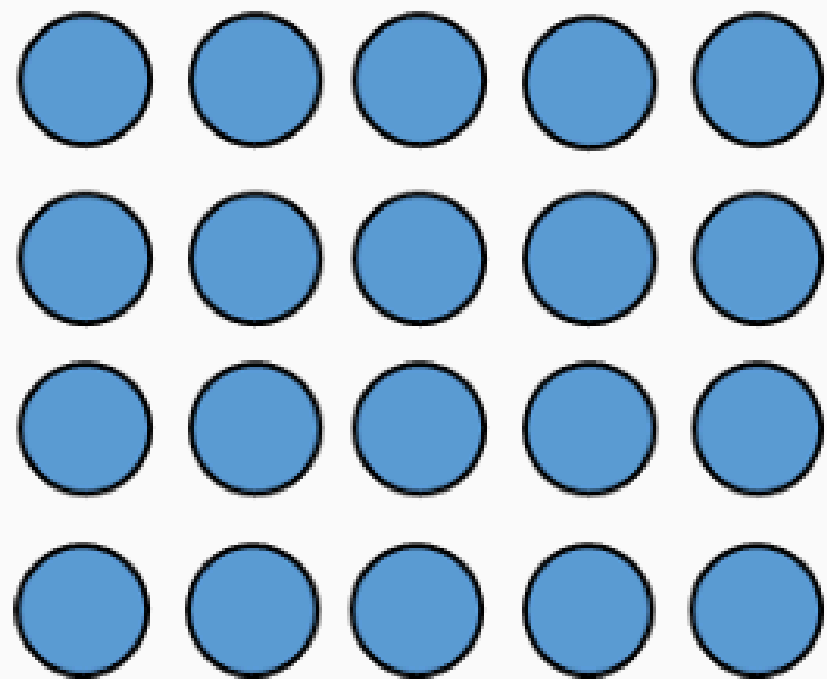


Use objects and circles.





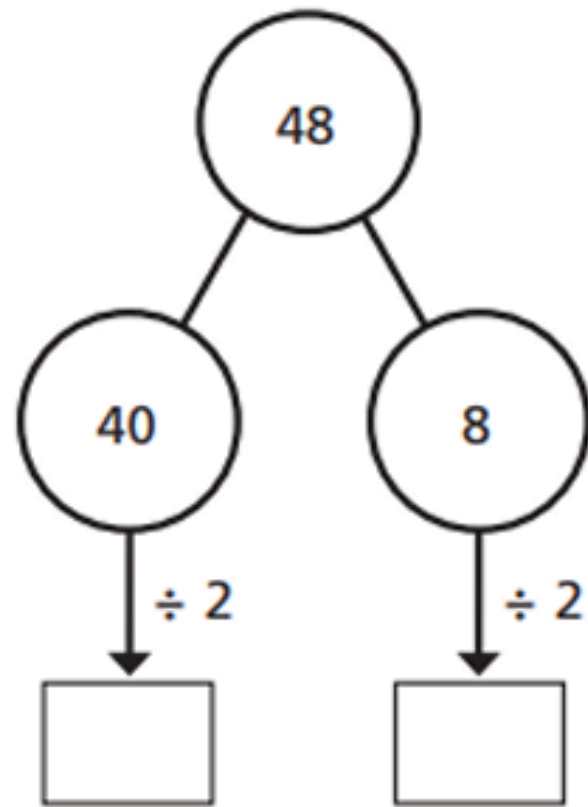
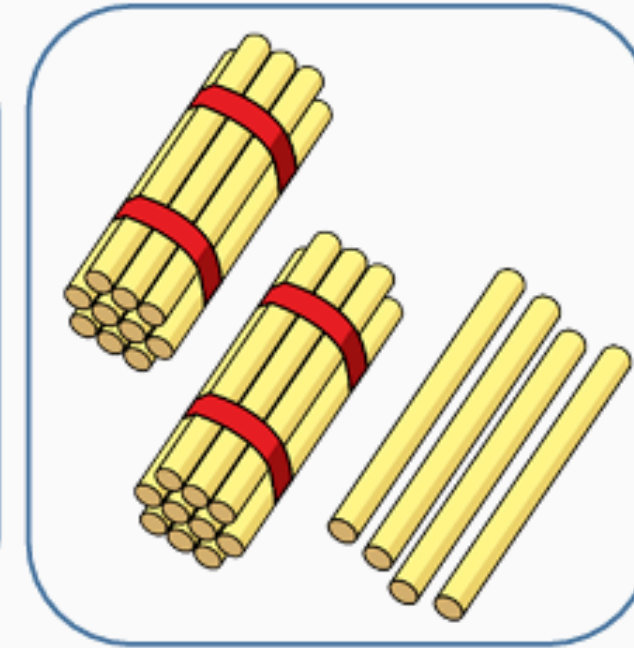
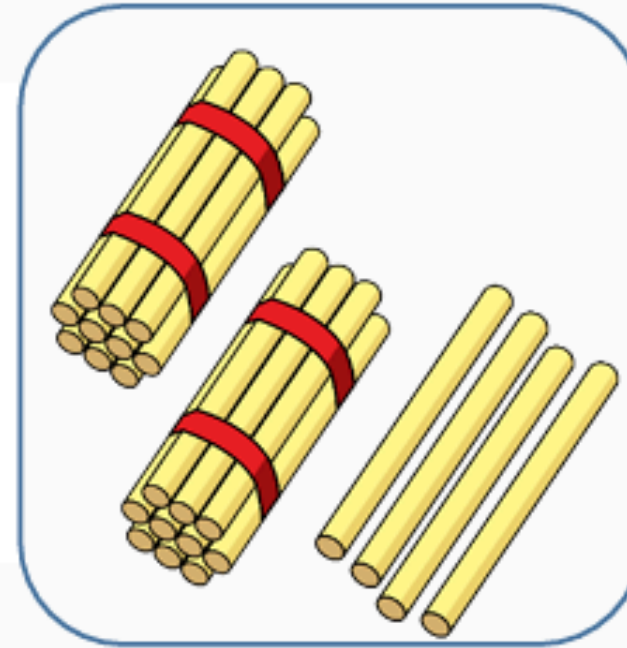
There are 20 apples altogether.
They are shared equally between 5 bags.
How many apples are in each bag?



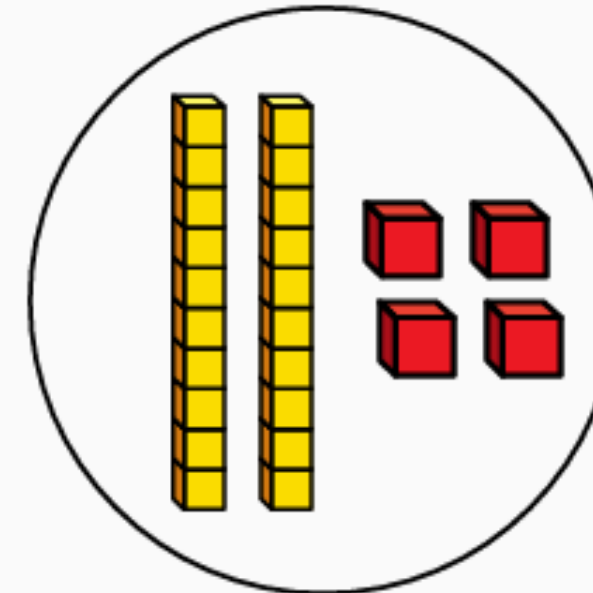
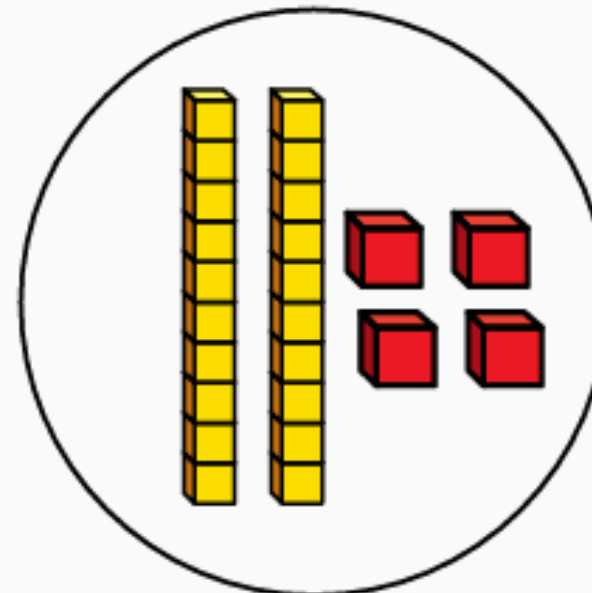
$$20 \div 5 = 4$$

Rhannu 2 digid a un digid/ Divide 2 digits with 1 digit

Tens	Ones
10 10	1 1 1 1
10 10	1 1 1 1











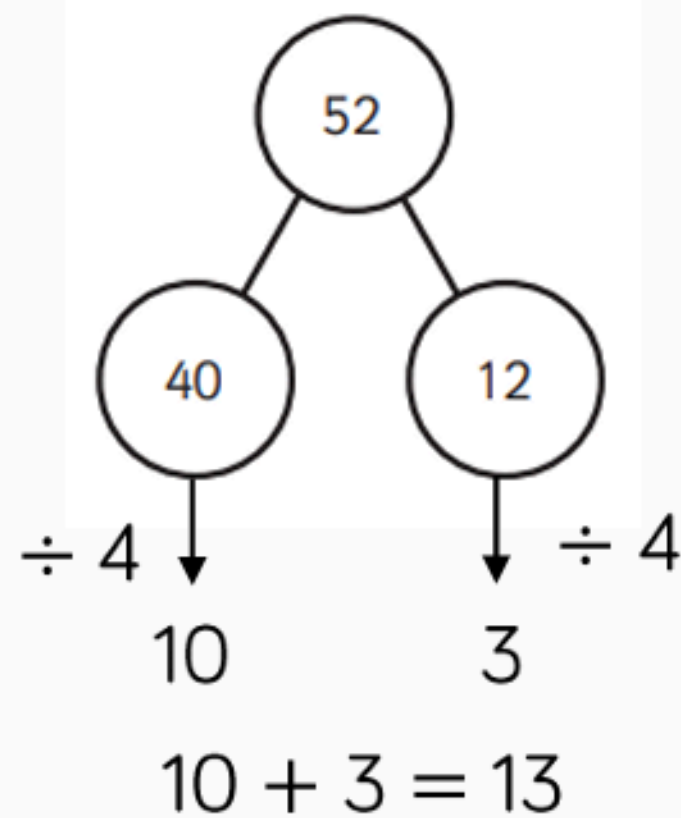
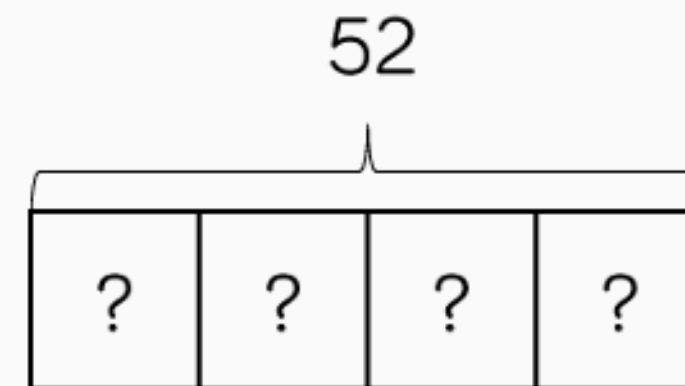
$$48 \div 2 = 24$$










Rhannu 2 digid a un digid (gyda chyfnewid)/ Divide 2 digits with 1 digit (with exchange)



Tens	Ones
	
	
	
	










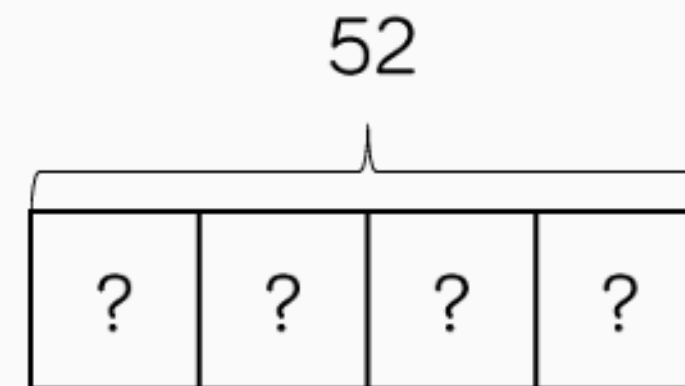
$$52 \div 4 = 13$$

Tens	Ones
	
	
	
	

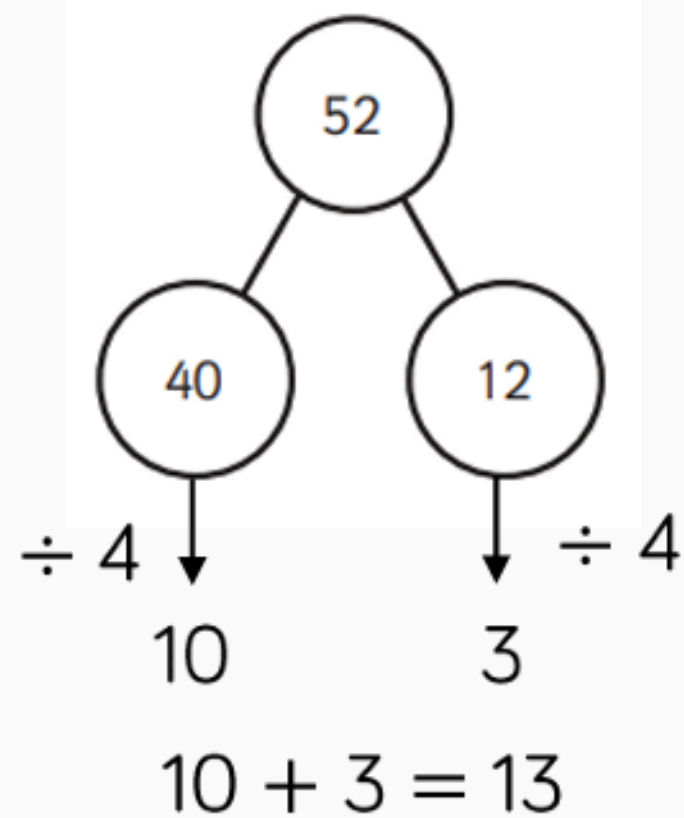
Rhannu 2 digid a un digid (gyda chyfnewid)/ Divide 2 digits with 1 digit (with exchange)








Tens	Ones
	
	
	
	

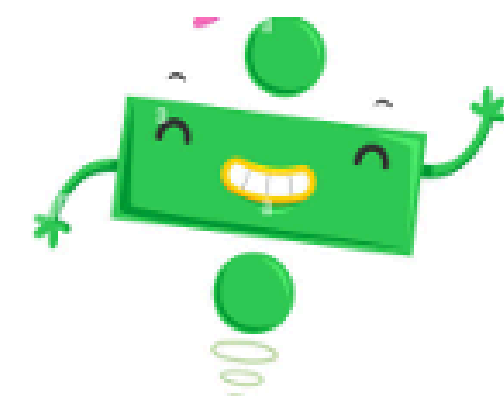


$$52 \div 4 = 13$$



Tens	Ones
	
	
	
	

Rhannu hir



Cam 1

$$\begin{array}{r} 21 \\ 4 \overline{) 84} \end{array}$$

$$84 \div 4$$

Yma, rydym yn edrych ar y degau fel unedau.

Felly $8 \div 4$ sef 2 ac yna $4 \div 4$ sef 1.

Cam 2

$$\begin{array}{r} 23 \\ 3 \overline{) 72} \\ \underline{6} \\ 12 \end{array}$$

$$72 \div 3$$

Yma, nid yw 7 yn nhabl 3; felly rydym yn rhannu gyda 6 yn lle (ac yna nodi bod 1 dros ben a'i gario at y rhif nesaf; sy'n gwnud 12.

Cam 3

$$\begin{array}{r} 030g3 \\ 5 \overline{) 153} \end{array}$$

$$153 \div 5$$

Yma, nid yw'r rhif olaf yn rhannu'n berffaith; felly, rydym yn nodi'r hyn sy'n weddill gyda 'g3'.

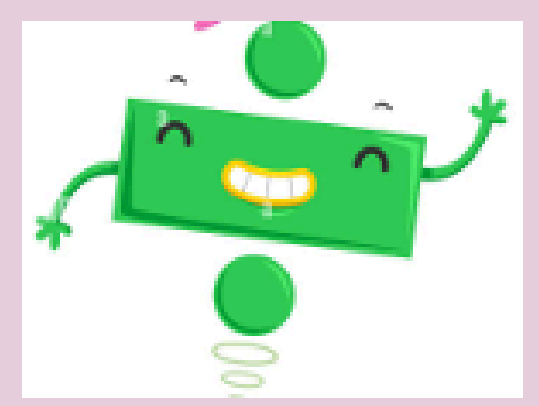
Cam 4

$$\begin{array}{r} 030.6 \\ 5 \overline{) 153.0} \end{array}$$

$$153 \div 5$$

Yma, yn hytrach na ysgrifennu 'g3' rydym yn cario'r gweddill drosodd at y pwynt degol.

Long Division



Step 1

$$84 \div 4$$

Here we look at the tens as units. So $8 \div 4$ is 2 and then $4 \div 4$ is 1.

Step 2

$$72 \div 3$$

Here, 7 is not in the 3 times table so we divide it by 6 instead (and note that there is 1 over to carry to the next number which makes 12).

Step 3

$$153 \div 5$$

Here the last number does not divide perfectly so, we note what is left with 'g3'.

Step 4

$$153 \div 5$$

Here, rather than write yn 'g3' we carry what is left over to the decimal point.

÷10, ÷100, ÷1000

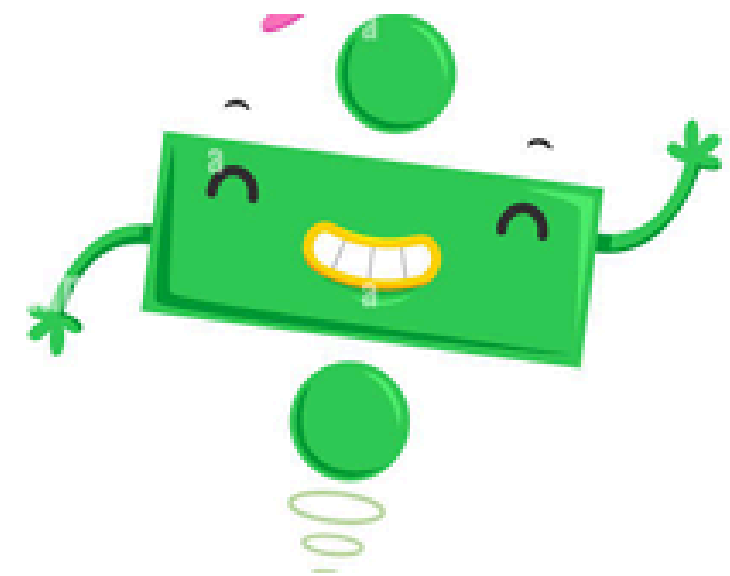
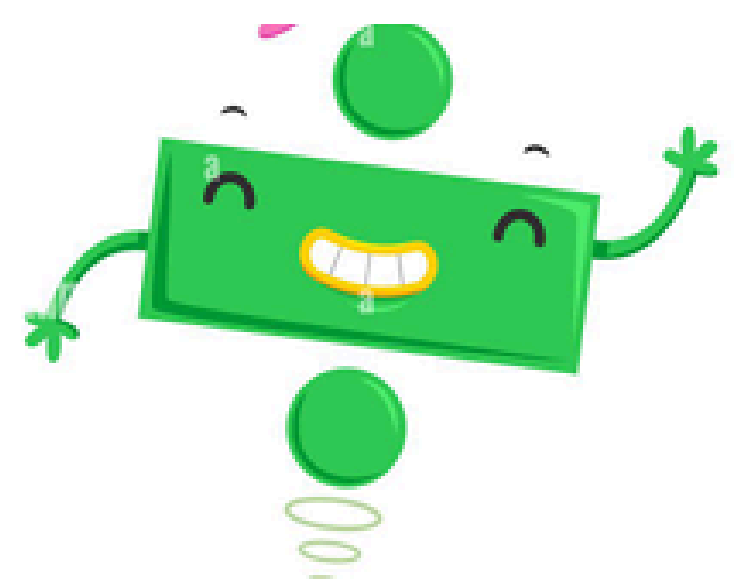
M	C	D	U
1	8	3	0
	1	8	3

$1830 \div 10 = 183$

M	C	D	U
1	8	0	0
		1	8

$1800 \div 100 = 18$

Os oes un sero mewn 10; rydych yn symud y rhifau i lawr unwaith. Os oes dau sero mewn 100; rydych yn symud y rhifau i lawr dwy waith ayyb.



÷10, ÷100, ÷1000

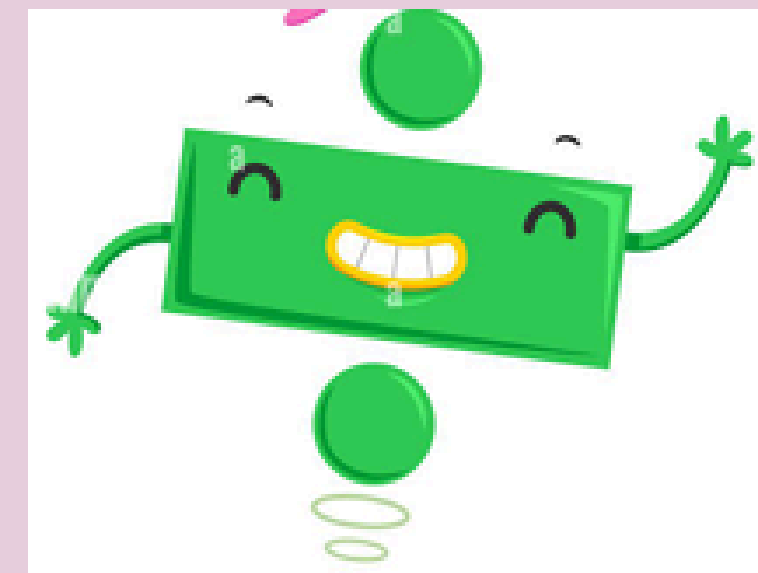
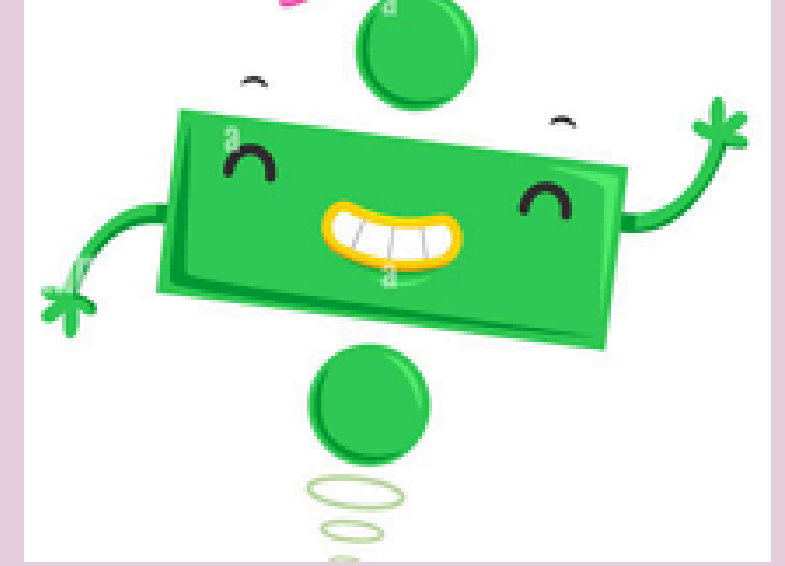
M	C	D	U
1	8	3	0
	1	8	3

$1830 \div 10 = 183$

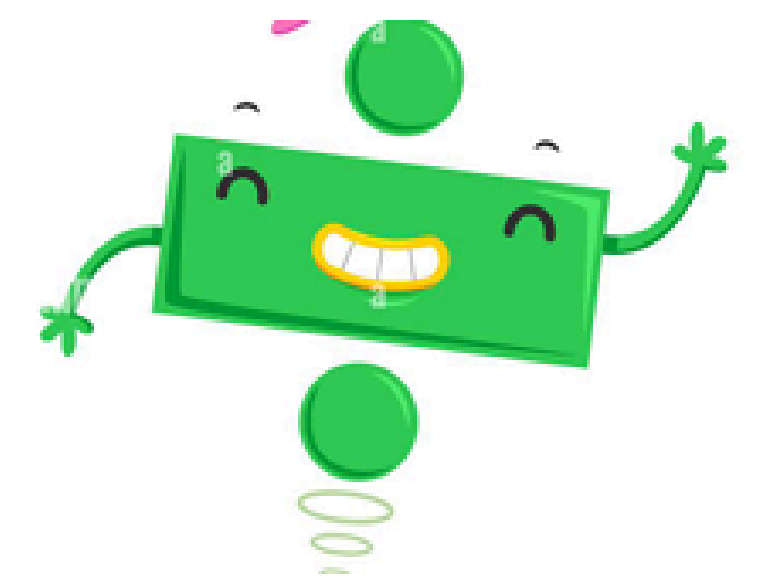
If there is one zero in 10; you move the numbers down once. If there is two zeros in 100; you move the numbers down twice etc.

M	C	D	U
1	8	0	0
		1	8

$1800 \div 100 = 18$



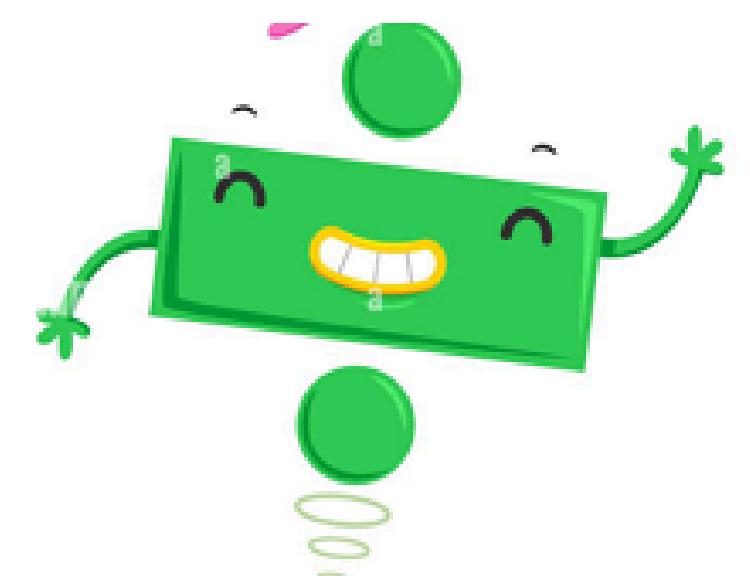
÷10, ÷100, ÷1000 (Degolion)



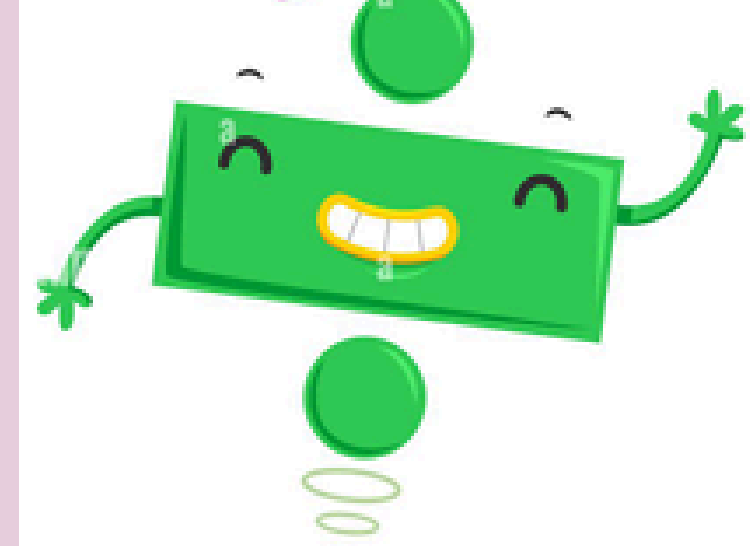
M	C	D	U	• Degolyn
1	3	4	7	
	1	3	4	• 7

$1347 \div 10 = 134.7$

Os oes un sero mewn 10; rydych yn symud y rhifau i lawr unwaith. Os oes dau sero mewn 100; rydych yn symud y rhifau i lawr dwy waith ayyb.



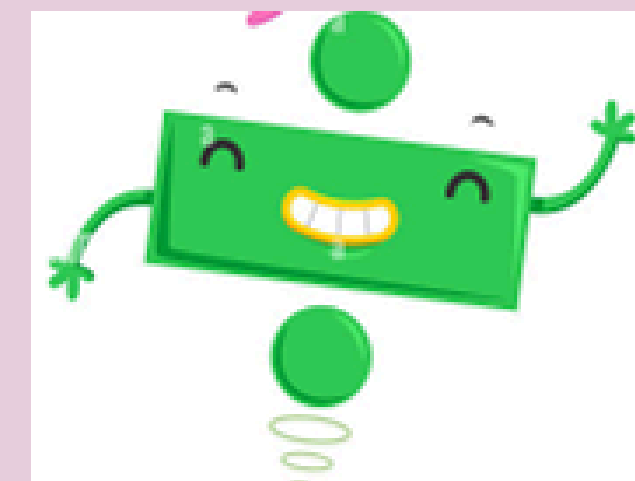
÷10, ÷100, ÷1000 (Degolion)



M	C	D	U	• Degolyn
1	3	4	7	
	1	3	4	• 7

$1347 \div 10 = 134.7$

Os mae un sero mewn 10; rydych yn symud y rhifau i lawr unwaith. Os mae dau sero mewn 100; rydych yn symud y rhifau i lawr dwy waith ayyb.



Sut i Gefnogi Adref

- Cyfrif gyda'ch plentyn bob dydd: grisiau, teganau, sanau, ceir, camau ac eitemau bwyd.
- Trafod rhifau o'ch cwmpas megis rhifau tai, prisiau mewn siopau a rhifau ar gloc.
- Ymarfer bondiau rhif i 10, 20 ac i 100 (e.e. $6 + 4$, $13 + 7$).
- Cynnwys eich plentyn mewn sefyllfaoedd go iawn: coginio, siopa, mesur a rhannu.
- Ymarfer tablau llوسي yn rheolaidd drwy lafarganu, caneuon a gemau.
- Gofynnwch gwestiynau syml fel 'un yn fwy', 'un yn llai' neu 'faint sydd ar ôl?'
- Defnyddio termau fel adio, tynnu, llوسي, rhannu, cyfanswm ac yn hafal i.
- Trafodwch yr amser: faint o'r gloch ydyw, sawl munud tan, a beth fydd yr amser mewn awr.
- Chwarae gemau bwrdd, cardiau neu apiau rhifedd sy'n annog cyfrif a strategaethau.
- Gofynnwch i'ch plentyn esbonio sut y daeth at yr ateb.
- Trafod camgymeriadau fel cyfleoedd i ddysgu.
- Canmol ymdrech, dyfalbarhad a hyder, nid dim ond cywirdeb.

How To Support At Home

- Count with your child every day: stairs, toys, socks, cars, steps, and food items.
- Discuss numbers around you, such as house numbers, prices in shops, and numbers on clocks.
- Practice number bonds to 10, 20, and 100 (e.g. $6 + 4$, $13 + 7$).
- Involve your child in real-life situations: cooking, shopping, measuring, and sharing.
- Practice multiplication tables regularly through chanting, songs, and games.
- Ask simple questions like "one more," "one less," or "how much is left?"
- Use terms like add, subtract, multiply, divide, total, and equal to.
- Discuss time: what time is it, how many minutes until, and what time it will be in an hour.
- Play board games, card games, or math apps that encourage counting and strategies.
- Ask your child to explain how they arrived at their answer.
- Discuss mistakes as learning opportunities.
- Praise effort, perseverance, and confidence, not just accuracy.



