

YEAR 6 WEEKLY LEARNING MAT 8

MATHS ZONE

Keep your times table knowledge in check!
Collect points on Maths shed
<https://www.mathshed.com/en-gb>

Sing along to times table song by popular artists.
<https://www.youtube.com/watch?v=0XG20leUKYE>

<https://www.youtube.com/watch?v=9os1VUUp5io>

<https://www.youtube.com/watch?v=VEEnQbnxWtqM>



Whitrose Maths Summer Term - Week 5 (w/c 18th May)

Lesson 1 – Multiplying by 10 ,100 and 1000

Lesson 2 – Multiplying decimals

Lesson 3 – Dividing decimals

Worksheets attached below the learning mat.

Revise your knowledge of multiples and rules of divisibility

<https://www.youtube.com/watch?v=Y1pAKJ4rf-M>

Can you make a poster to remind you of these rules?

Now test out your skills by completing the curious number challenge below the mat

ENGLISH ZONE

Read the following non-chronological reports (Attached below the mat)

These will help you get the tone and language more formal in your own report.

The storm unicorn



Basilisk



Billywig



https://readon.myon.co.uk/reader/index.html?a=riz_bodys_f16

Read the book



Literal: Where do phorid flies lay their eggs?

Literal: Read P8, what do scientists believe is causing bees to leave the hive during the middle of the night? Read P10

Literal: How is the Jewel Wasp able to kill other insects much larger than itself?

Author Intent: How does the layout of P10 engage the reader more effectively?

Author Intent: Why do you think the author has chosen to include a mini glossary on each page rather than at the end of the book?

http://www.blueplanetdiaries.com/createcreature/create_creature.html

Can you create the ultimate survival hybrid creature?



Write a non-chronological report about your new species.

Think about the different sections you could include in your report:

Appearance

Habitat

Diet

Reproduction

Special features

Will you add subheadings, fact files, did you know boxes and diagrams to give it that professional finish?

TOPIC ZONE

Try the BBC Y6 daily lessons
<https://www.bbc.co.uk/bitesize/dailylessons>

Bitesize

Try Oak National Academy lessons
<https://www.thenational.academy/online-classroom>



WORLD RECORD HEIGHTS

Scroll to take the rocket into space.
<http://www.bbc.co.uk/future/bespoke/20140304-how-big-is-space-interactive/>

Write some of the world records from the journey?



Could you find out more about when these were made? Who made them?

How could you present them in an interesting way?
Certificates? A graph? A presentation? A news broadcast?

Brazilian Mardi Gras

Learn all about the colourful carnival.



Can you design an outfit for the Mardi Gras?

You could even try and make a head dress, a mask, a scale model or a collage.

<https://www.marvelhq.com/create-your-own-super-hero>

Create your own super hero



No access to internet.
Why not draw one?
What super power would they have?
What costume would they wear?

Can you share your learning on your class page



Keep your eye on the school blog for more fun activities to keep you busy!

THE STORM UNICORN

The Storm Unicorn is a type of unicorn that has become very rare.

A Storm Unicorn has the body of a horse and a long horn. The horn is usually a spiral shape and sticks out from the middle of its head. Most are a beautiful ebony colour with flashes of gold and silver that look like lightning. As a Storm Unicorn moves, it sends out showers of tiny, electric splinters.

Like the Common Unicorn, the Storm Unicorn lives in forests. They are very shy and therefore are not often seen. During the daytime, they sleep under bushes or curled up amongst ferns. At night, the Storm Unicorn emerges and, if you are lucky, can be seen by moonlit pools. They are easy to detect because they make a low rumbling sound as they breathe.

Storm Unicorns have a fairly limited diet. In the main, they live on leaves, grass and other forms of vegetation. However, they can also be tempted with apples. Additionally, some

like to eat nuts. Be careful when you are near a Storm Unicorn because their bodies can give off an electric shock!

Unfortunately, because Storm Unicorns have magic in their horns, this has meant that they have been hunted almost to extinction. Their horns are ground down to a paste that can then be used to enchant even the cruellest of tyrants. Over the years, so many Storm Unicorns have been killed that they have learned to stay away from mankind.

The last known sighting of a Storm Unicorn was in 1673 by a man called Dr Dapper who claimed that he saw one whilst walking in the woods. The most amazing thing about Storm Unicorns is that if you meet one, it can bring you great luck. For this reason, many people still hope to catch a glimpse of this most beautiful and fiery creature.

THE FROST UNICORN

There are many different breeds of unicorn and one of the most intriguing is the Frost Unicorn. Very little is known about this variety because it camouflages itself so well that it is rarely ever seen.

Would you be able to recognise a Frost Unicorn if you saw one? In fact, they are very similar to the large majority of unicorns. Like most unicorns, they have a long horn, the body of a horse and excellent eyesight. Typically, they are an amazing white colour which glitters as their hair catches the sunlight. However, a few have been spotted which are a light green colour. This allows them to blend in amongst forest vegetation. Furthermore, they have amazing teeth made of diamonds and their tails consist of icy, silver hair. The main feature of the Frost Unicorn is that it freezes anything that it touches. Amazingly, they scatter flakes of snow as they move along.

No one actually knows where Frost unicorns live during the summer months. It is thought that they hibernate in the North Pole, possibly buried beneath ice caps. However, in the winter they can be seen hiding in forests. If you wish to see a Frost Unicorn, then you should wait by a moonlit pool when the snow is falling. You will need to keep quite still and be patient. Remember to take some icicles with you as Frost Unicorns

love to lick ice as it keeps their body temperature stable.

Are Frost Unicorns dangerous? Many people believe that they are because they have the ability to enchant anyone who sees them. Children and adults have disappeared after seeing a Frost Unicorn and it is believed that they have been tempted into

riding a unicorn. Unfortunately, if you touch a Frost Unicorn, you run the risk of being turned to ice! So, anyone curious enough to track a Frost Unicorn should be very careful.

Did you know?

There are 17 different species of unicorn in the world.



BASILISK

(also known as the KING OF SERPENTS)

M.O.M. Classification: XXXXX

THE FIRST RECORDED Basilisk was bred by Herpo the Foul, a Greek Dark wizard and Parselmouth, who discovered after much experimentation that a chicken egg hatched beneath a toad would produce a gigantic serpent possessed of extraordinarily dangerous powers.

The Basilisk is a brilliant green serpent that may reach up to fifty feet in length. The male has a scarlet plume upon its head. It has exceptionally venomous fangs but its most dangerous means of attack is the gaze of its large yellow eyes. Anyone looking directly into these will suffer instant death.

If the food source is sufficient (the Basilisk will eat all mammals and birds and most reptiles), the serpent may attain a very great age. Herpo the Foul's Basilisk is believed to have lived for close on nine hundred years.

The creation of Basilisks has been illegal since medieval times, although the practice is easily concealed by simply removing the chicken egg from beneath the toad when the Department for the Regulation and Control of Magical Creatures comes to call. However, since Basilisks are uncontrollable except by Parselmouths, they are as dangerous to most Dark wizards as to anybody else, and there have been no recorded sightings of Basilisks in Britain for at least four hundred years.



A chicken egg hatched beneath a toad would produce a gigantic serpent possessed of extraordinarily dangerous powers

BILLYWIG

M.O.M. Classification: XXX

THE BILLYWIG is an insect native to Australia. It is around half an inch long and a vivid sapphire blue, although its speed is such that it is rarely noticed by Muggles and often not by wizards until they have been stung. The Billywig's wings are attached to the top of its head and are rotated very fast so that it spins as it flies. At the bottom of the body is a long thin sting. Those who have been stung by a Billywig suffer giddiness followed by levitation. Generations of young Australian witches and wizards have attempted to catch Billywigs and provoke them into stinging in order to enjoy these side effects, though too many stings may cause the victim to hover uncontrollably for days on end, and where there is a severe allergic reaction, permanent floating may ensue. Dried Billywig stings are used in several potions and are believed to be a component in the popular sweet Fizzing Whizzbees.



Curious Number

Age 7 to 11 ★★★



Are you curious about numbers? Can you use your mathematical skills to find some solutions to the problems below?

Can you order the digits 1, 2 and 3 to make a number which is divisible by 3? And when the final digit is removed again it becomes a two-digit number divisible by 2, then finally a one-digit number divisible by 1?

Can you order the digits 1, 2, 3 and 4 to make a number which is divisible by 4? And when the final digit is removed it becomes a three-digit number which is divisible by 3. And when the final digit is removed again it becomes a two-digit number divisible by 2, then finally a one-digit number divisible by 1?

Can you order the digits 1, 2, 3, 4 and 5 to make a number which is divisible by 5? And when the final digit is removed it becomes a four-digit number which is divisible by 4. And when the final digit is removed it becomes a three-digit number which is divisible by 3. And when the final digit is removed again it becomes a two-digit number divisible by 2, then finally a one-digit number divisible by 1?

What systems are you using?

What do you know about numbers which can be divided by 3, 4, 5?

Now what about taking this further for digits 1, 2, 3, 4, 5, and 6?

What do you know about numbers which can be divided by 6, 7, 8 and 9?

4 Complete the calculations.

a) $13.44 \times 10 =$

d) $4.4 \times$ $= 4,400$

b) $41.4 \times 100 =$

e) $= 1.03 \times 100$

c) $0.415 \times 1,000 =$

f) $30.44 =$ $\times 10$

5 Complete the diagrams.



What do you notice? Why does this happen?



6 Write $>$, $<$ or $=$ to compare the number sentences.

$1.4 \times 10 \times 10 \times 10$ $1.4 \times 1,000$

$1.4 \times 10 \times 100$ $1.4 \times 1,000$

$1.4 \times 10 \times 10$ $1.4 \times 1,000$

$1.4 \times 10 \times 2$ 1.4×100

7 Kim is calculating 14.3×200

She writes this as her answer.

$$14.3 \times 200 = 28.600$$

Explain Kim's mistake.

8 Use the cards to complete the calculation.

You can use each card more than once.



0.002 $= 2,000$

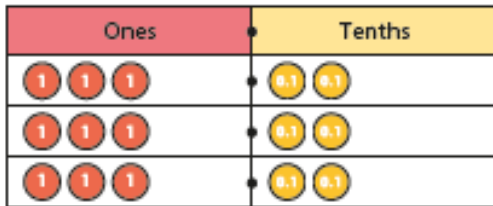
How many ways is it possible to complete this calculation?

Talk about it with a partner.

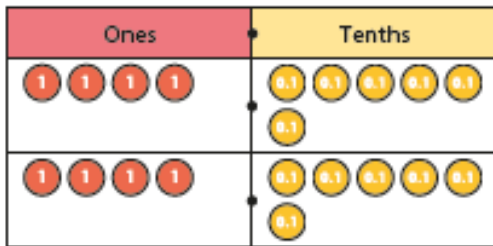
Multiply decimals by integers

1 Use place value counters to solve the calculations.

a) $3.2 \times 3 =$



b) $4.6 \times 2 =$



2 Solve the multiplication. Draw your answer.

$12.2 \times 3 =$

Tens	Ones	Tenths



3 Nijah uses long multiplication to solve 3.72×3

		3	7	2
	x			3
		0	0	6
		2	1	0
		9	0	0
	1	1	1	6

Use long multiplication to work out the calculations.

a)

		4	8	6
	x			4

b)

		2	0	9
	x			6

4 Work out the multiplications.

a) $5.2 \times 4 =$

d) $= 2.34 \times 3$

b) $14.3 \times 3 =$

e) $11.505 \times 4 =$

c) $6 \times 9.1 =$

f) $9.602 \times 6 =$

- 5 0.25 kg of flour is needed to make one cake.
How much flour is needed to make four cakes?



- 6 Work out the multiplications.

a) $7.2 \times 2 =$ b) $= 3.45 \times 3$
 $7.2 \times 4 =$ $= 34.5 \times 3$
 $14.4 \times 4 =$ $= 345 \times 3$
 $7.2 \times 8 =$

- 7 Amir is solving 3.4×4

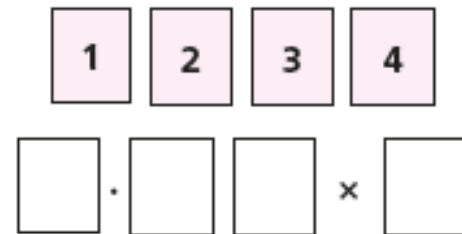


To solve this, I did 34×4 , which was 136. Then I multiplied my answer by 10 to get an answer of 1,360.

Do you agree with Amir? _____

Explain why.

- 8 Use the digits 1, 2, 3 and 4 once each to create a calculation.



- a) How many different products can you make?

- b) What is the greatest possible product?

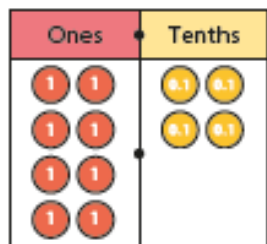
- c) What is the smallest possible product?

- d) What is the product closest to 12?

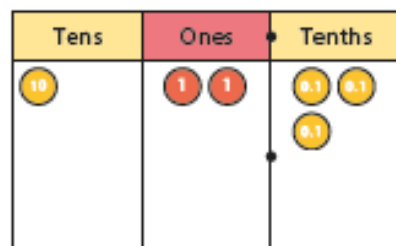
Divide decimals by integers

1 Use place value counters to work out the divisions.

a) $8.4 \div 4 =$



b) $12.3 \div 3 =$



2 Work out the division. Draw your answer.

$16.4 \div 4 =$

Tens	Ones	Tenths



3 Brett uses short division to work out $13.2 \div 6$

		0	2	2
	6	1	3	2

Use short division to work out the calculations.

a)

	7	2	2	4

b)

	8	1	8	4	8

4 Work out the divisions.

a) $25.6 \div 8 =$

d) $= 19.45 \div 5$

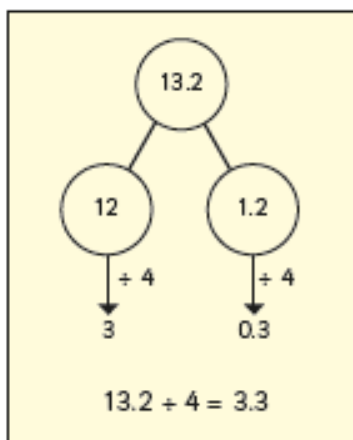
b) $14.8 \div 4 =$

e) $202.35 \div 3 =$

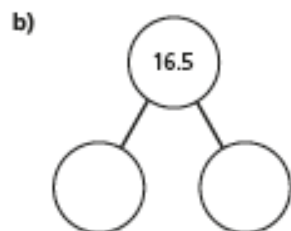
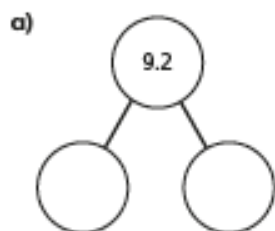
c) $18.48 \div 6 =$

f) $105.12 \div 9 =$

- 5 Esther solves $13.2 \div 4$ by partitioning 13.2 into two numbers that are easier to divide.



Use Esther's method to complete the part-whole model and calculation.



$$9.2 \div 4 = \square$$

$$16.5 \div 3 = \square$$

Compare answers with a partner. Did you partition your numbers in the same way?

- 6 Work out the divisions.

a) $9.64 \div 4 = \square$

$$96.4 \div 4 = \square$$

$$0.964 \div 4 = \square$$

$$9.64 \div 8 = \square$$

b) $19.44 \div 9 = \square$

$$19.53 \div 9 = \square$$

$$19.62 \div 9 = \square$$

- 7 Fill in the missing numbers.

$$3.6 \div 4 = 36 \div \square$$

$$3.6 \div 4 = \square \div 8$$

- 8 Complete the calculation.

$$8.4 \div \square = 4.2 \div \square$$

How many different solutions can you find?

What patterns do you notice? Talk about it with a partner.

