Erina Heights Public School
Learning from Home - Stage 3

Term	1	2	3	4						
Weeks	1	2	3	4	5	6	7	8	9	10	11

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00	Daily Zoom Meeting	5B Zoom Link	5/6R Zoom Link	6S Zoom Link	
Morning	**Literacy Activities**	**Literacy Activities**	**Literacy Activities**	**Literacy Activities**	FUN FRIDAY BINGO GRID
	Recess Break				
Middle	**Maths Activities**	**Maths Activities**	**Maths Activities**	**Maths Activities**	
	Manga High	**Manga High**	**Manga High**	**Manga High**	
	Lunch Break				
Afternoon	**Passion Project**	**Passion Project**	**Passion Project**	**Passion Project**	
Optional Activities	Last year, the Office of the Advocate for Children and Young People launched a website called Digital Lunchbreak. Children and young people can learn, create and discover through digital workshops, learning materials, virtual excursions and more. Visit the Digital Lunchbreak website by clicking here www.digitallunchbreak.nsw.gov.au				

Stage 3

Literacy Activities

Term 4 – Week 1

Expectations

- ☺ Do one activity each day.
- ☺ If you get stuck, send your teacher a message on Google Classroom.
- ☺ You can add extra slides to do your answers, otherwise you can do your work in a Google doc or workbook at home.
- ☺ Submit your work on Google Classroom.
- ☺ Do the best you can! ☺

TED Ed

Why are there so many types of apples?

Learning Intention: To use comprehension strategies to build meaning.

What to do?
- Read the questions on the next slide first.
- Watch the video. Take notes if it helps.

Your task:
- Answer the questions on the next slide.

TED Ed

Why are there so many types of apples?

Learning Intention: To use comprehension strategies to build meaning.

How many apple varieties are there?

Why do breeders create different types of apples?

What are some things that breeders need to consider when growing apples?

What is cross-pollination and why do breeders use it?

How long does it take for the new apple tree to produce fruit?

What are some of the traits in the apples that the breeders test for?

RESEARCH TASK

Research countries beginning with the letter A - Z. Write the countries below.

A		N	
B		O	
C		P	
D		Q	
E		R	
F		S	
G		T	
H		U	
I		V	
J		W	
K		X	
L		Y	
M		Z	

VOCABULARY - *Parts of the body*

Fill in the missing blanks with the correct words from the box below.

larynx dentine sinuses aorta cranium capillaries

phlegm ulna heart intestine iris sinew

Double click on the pink text boxes to type your answer.

1. The _____ are blood vessels that connect veins to arteries.
2. Cavities in your nose are called _____
3. The bony material beneath the outer covering of teeth is _____
4. _____ is the largest artery in your body.
5. Your vocal chords are situated in your _____
6. The _____ is the bony part that covers your brain.

1. The _____ is the circular coloured part of the eye around the pupil.
2. A tendon is also known as a _____
3. Adrenalin is a hormone that can speed up your _____
4. Thick mucus of the throat is called _____
5. The _____ is the longer of the two bones in your forearm.
6. The colon is also called the large _____

You may need to research the meanings of the vocabulary words to help you answer the questions.

WRITING TASK

Writing instructions

Learning Intention: To write a set of well-sequenced and clear instructions.

What to do:

- Look at the picture.
- Write some instructions to explain how to draw the picture on the next slide.
- Read your instructions to a family member who hasn't seen the picture.
- On a piece of paper, the family member attempts to draw the picture by listening only to your written instructions. They must not have seen the picture.
- Compare the family member's picture and the original.
- Dojo points will be given if you include photos of the drawings in your slides.

WRITING TASK

Writing Instructions

Write your instructions here:

FUN FRIDAY BINGO GRID

Choose a line of 5 activities in a row to do today. Your line can go vertically, horizontally, diagonally or zig-zag. Have a great day. Highlight the activities you are choosing and try and share some pictures with your teacher and class of the fun things you got up to today.

Play a board game or card game with your family members.	 Take a photo of each thing you find as proof.	Go on a bush or beach walk.	List all the different colours you can see outside and tally how many items you see in each colour.	Hide some treasure and create a treasure map for someone in your family to follow.
Try and find an object for each letter of the alphabet around your house or outside.	Create an artwork in your driveway or on concrete using coloured chalk.	Make a tent or special fort in your lounge room. Ask if you can camp out in it for the night.	Play with your pet for 30minutes or take them for a walk.	Read a book for 20minutes or write your own story.
Make up a dance routine to your favourite song.	Ride your bike, scooter, roller skates (anything with wheels) for 30 minutes. Remember to wear your helmet.	Collect some leaves, flowers, sticks, feathers and any other natural products and create an artwork with your collection.	Build an amazing Lego creation.	Do a painting or drawing of anything you choose.
Make brownies or cupcakes and deliver them to a neighbour with a nice message.	Do some cooking or baking or create your own unique sandwich filling.	Have a paper-plane flying competition.	Play your favourite music and dance around. Sing along to all the words and dress you if you like.	Have an online playdate with a friend using Zoom or Facetime.
Paint some rocks and create a kindness garden in your backyard.	Put on a puppet show or concert for your family members. You could use stuffed toys or figurines as the characters.	Go on a bug scavenger hunt around the yard. Take photos or draw any interesting bugs that you find.	If you own a tent, set it up outside and go camping with your family. Don't forget the marshmallows!	Create a course that includes at least 5 obstacles/challenges in your backyard, park or open area. See how quickly you can complete it.

Maths
Week 1 Term 4

Maths Instructions:

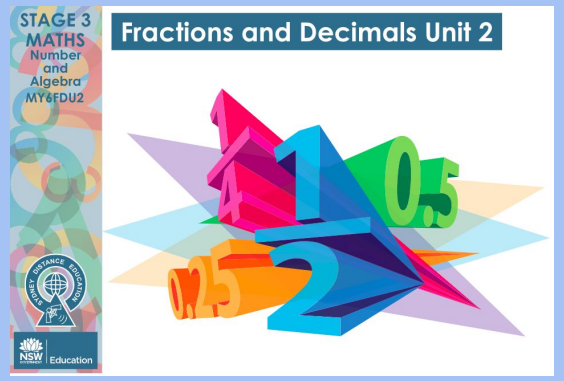
1. Watch the instructional videos before beginning the tasks. You may need to watch these more than once.

1. Complete 1 or both activities each day - activities can be completed on your slides or on paper or in a book. Please draw any tables or diagrams that you need to complete these activities.

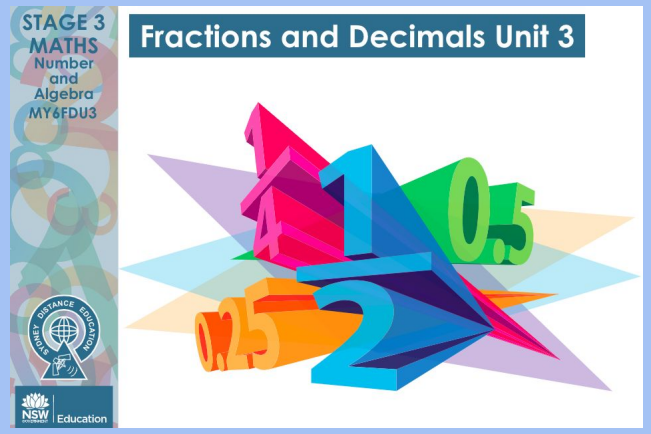
Instructional Video Links

Decimals

Activity 1 Video

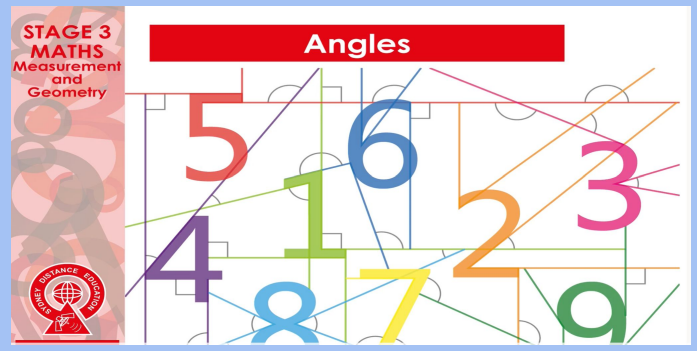


Activity 2 Video

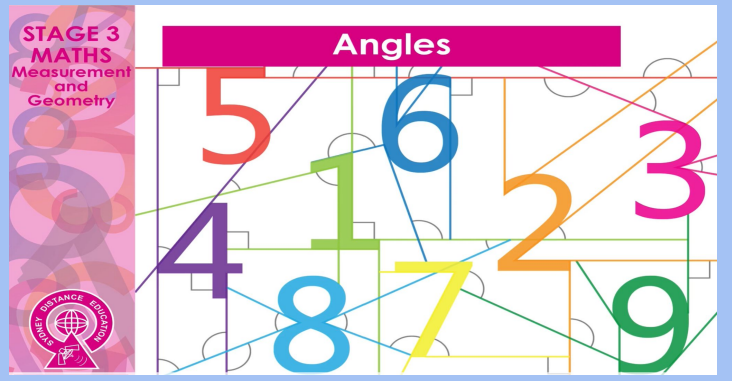


Angles

Activity 1 Video



Activity 2 Video



Monday

- **decimal fraction:** any fraction written as a decimal
- **decimal point:** a point or dot which separates the whole number from the fractional part of a number
- **decimal system:** a number system based on 10
- **fraction:** a part of a whole or group, represented with a numerator (top number) and denominator (bottom number)
- **rounding:** changing a number to make it easier to use; we often round numbers to the nearest 10, 100, 1000, 10 000, 100 000 or 1 000 000
- **trade:** to change a quantity into smaller or bigger parts without changing its value

- **algorithm:** a step-by-step mathematical procedure
- **decimal place:** the position of a digit to the right of the decimal point
- **decimal point:** a point or dot which separates the whole number from the decimal in a number
- **partitioning:** splitting a number into parts based on place value

Daily Speed Test

What you will need:

- Timer (if you don't have one on a device use this: https://www.online-stopwatch.com/)
- Piece of paper
- Pencil

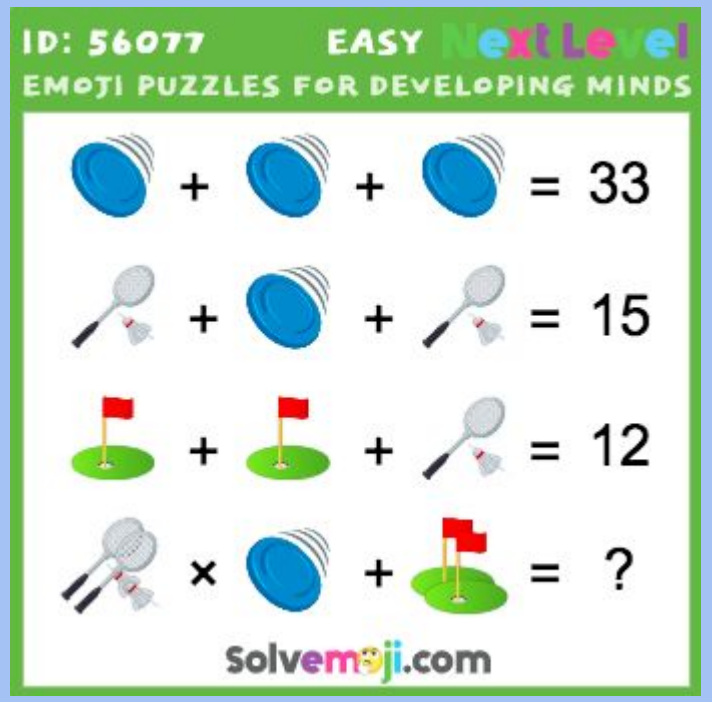
What to do:

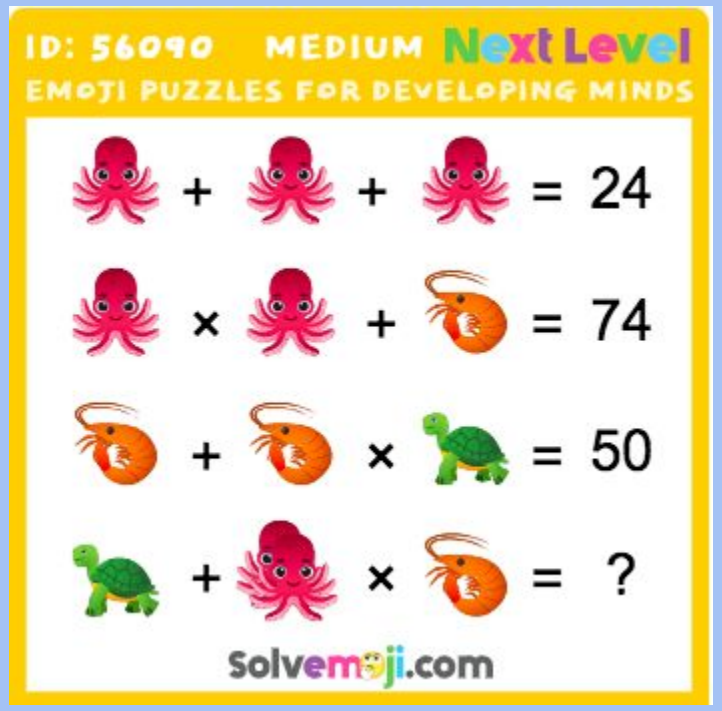
- Select a times table that you would like to improve on (**must be between 6 and 12**)
- Set the timer and begin writing your times table out from start to finish. E.g. **0 x 7** = 0 all the way through to **12 x 7** = 84
- Press stop on the timer when you have finished and record your time
- Consider your time and set an achievable goal for the next day. E.g. *If you got 1 minute 20 seconds you might aim for 1 minute 15 seconds the next day.*
- **Record your times in the table below**

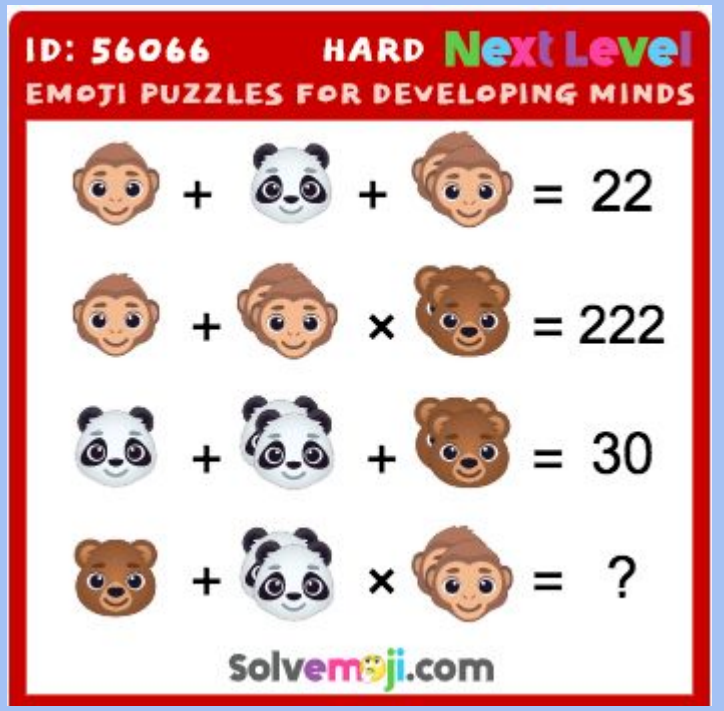
Monday	Tuesday	Wednesday	Thursday	Friday

Ignition Activity - choose your level

Answers for today will be posted at the end of the week







Activity 1

Imagine you are out shopping and you have some items in your shopping trolley. You suddenly remember that you only have a $20 note. Will it be enough to pay for the items in your trolley?

You don't want to wait until you get to the checkout so... it's time to estimate.
It might take too long to add up the actual prices of each item but if you **round** each amount to the nearest dollar then you will have a good idea what the cost will be.

Look at the example below.

In my trolley I have...	I estimate it will cost me...
$5.89	$6.00
$4.05	$4.00
$2.90	$3.00
$4.85	$5.00
	$18.00 Yes! I will have enough!

Activity 1

Rounding decimals is used to estimate the cost, amount, distance, weight or time of something. The result is less accurate but it is easier to use.

How do you decide which whole number to round the decimal up or down to?

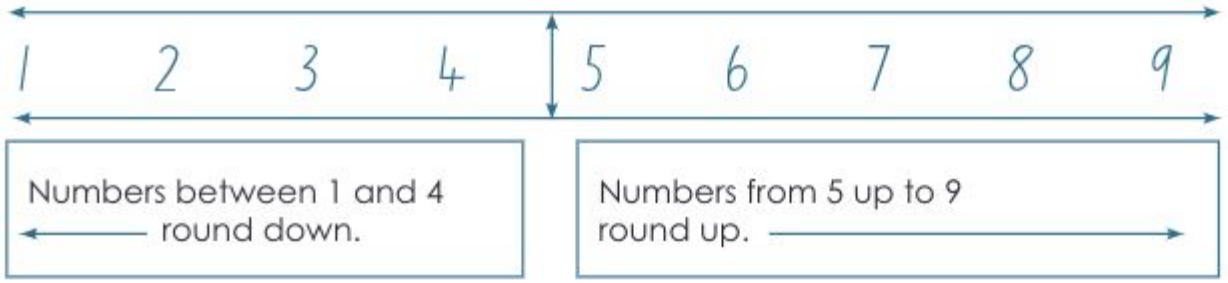
Look at the example below.

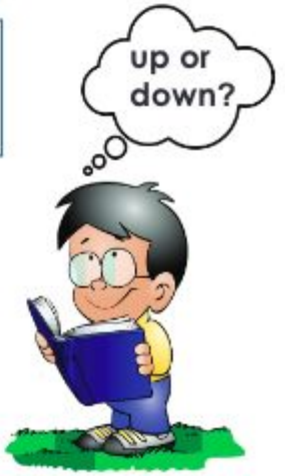
4.612

The place value of the tenths tells us whether to round up or down.

The place value we need to look at is tenths. This is to the right of the decimal point.

Do we round up or down?





This means that the decimal number 4.612 is rounded up to 5.

1. Round the following decimals to the nearest whole number.

a. 3.21 _____ **b.** 8.42 _____ **c.** 16.75 _____ **d.** 63.536 _____ **e.** 723.923 _____

Activity 1

2. Complete the following word problem using your estimation and rounding skills.

Josie is going on holidays to Spain. The weight limit on her checked baggage is 40 kg. Read through the list of items in her bag and what they weigh.

clothes - 18.250 kg

shoes - 0.65 kg

toiletries - 3.635 kg

books - 8.25 kg

towels - 1.28 kg

a. I estimate Josie's luggage will weigh _____ kg. Use the space below for working out.

b. Circle the correct word in the sentence.

Josie's luggage will be **under/over** the weight limit.

c. If Josie was over the weight limit, which items could she take out or reduce first to make sure her luggage weighs less than 40 kg?

_____

_____

Activity 2

Here are some special tips that you need to keep in mind when calculating with decimals.

Addition

$4.76 + 3.22$

ones	tenths	hundredths
4	7	6
3	2	2
7	9	8

Line up numbers with the same place values.

Add each column starting at the smallest place value.

Line up the decimal points in each number.

Subtraction

$6.39 - 4.81$

ones	tenths	hundredths
~~5~~ 6	1 3	9
4	8	1
1	5	8

Trading is used in decimal algorithms.

Remember... You might need to use trading when adding or subtracting decimals. It is the same method you use for whole number algorithms.

Activity 2

2. Complete the following addition and subtraction algorithms. Use trading when necessary. Remember to include the decimal point in your answer.

a.

5.26 + 6.81

b.

29.82 + 12.55

c.

86.573 + 2.348

d.

34.269 + 5.731

e.

911.54 + 36.43

f.

8.56 - 6.23

g.

57.39 - 14.61

h.

49.838 - 17.919

i.

563.917 - 14.686

Activity 2

Solve the following decimal problems using the operations of addition or subtraction.
You can use your calculator to help you.
Calculator clue: The display on your calculator will not show dollars and cents, you will need to add these in.

e.g. calculator display: 4.35 → **Your answer: $4.35**

a. Kate bought some pencils for $7.95 and a notebook for $10.75. How much did it cost her altogether?

b. The total rainfall for April was 119.12 cm and in May it was 128.28 cm. How much rain fell in these two months?

c. A bakery ordered 10.55 kg of sugar. In one week the bakery used 4.75 kg of the sugar. How much sugar does the bakery have left?

d. Movie tickets cost $14.95 each. A combined dinner and movie ticket costs $25.55. Jen and Kay went for dinner first and then afterwards met Ali at the movies.

i. How much did the three friends pay altogether?

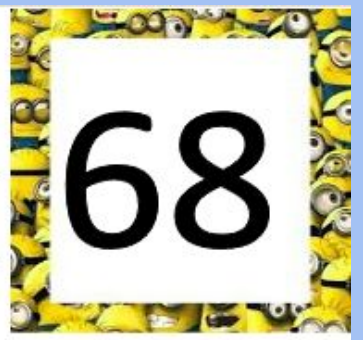
ii. How much more did Jen pay than Ali?

Tuesday

Complete your Speed Test and record your time in the table above.

Ignition Activity – choose your level

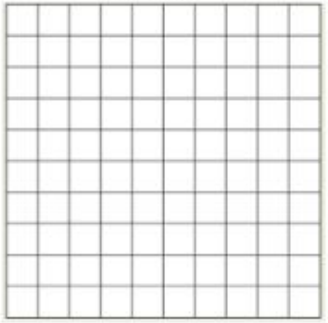
NUMBER OF THE DAY



X 10	
X 100	
X 1000	
÷ 10	
÷ 1000	
+ 37	
- 29	
X 3	
÷ 2	
2	
3	

Round to 10	
Find 1/4	
Roman Numeral	

Shade in



Write all the factor pairs!

Write as:

%	
Decimal	
Fraction	/100

Date:

Glossary - Angles

- **angle:** the amount of turn between two straight lines
- **arm:** one of the two lines that form an angle
- **degree:** unit for measuring angle size, also written as °. For example, 36° is 36 degrees
- **protractor:** a device for measuring angle size
- **vertex (angles):** a point where two straight lines meet, forming an angle

- **adjacent angles:** two angles that meet at a point and share a common arm and a common vertex
- **angle of revolution:** the angle where one arm has turned completely around a point until it is on top of the other. This angle is equal to 360°.
- **degree:** unit for measuring angle size, also written as °, for example 36° is 36 degrees
- **right angle:** the angle that is equal to 90°
- **straight angle:** the angle that is equal to 180°
- **vertically opposite angles:** the two opposite angles formed when two lines intersect

Daily Speed Test

What you will need:

- Timer (if you don't have one on a device use this: https://www.online-stopwatch.com/)
- Piece of paper
- Pencil

What to do:

- Select a times table that you would like to improve on (**must be between 6 and 12**)
- Set the timer and begin writing your times table out from start to finish. E.g. **0 x 7** = 0 all the way through to **12 x 7** = 84
- Press stop on the timer when you have finished and record your time
- Consider your time and set an achievable goal for the next day. E.g. *If you got 1 minute 20 seconds you might aim for 1 minute 15 seconds the next day.*
- **Record your times in the table below**

Monday	Tuesday	Wednesday	Thursday	Friday

Have A Go!

Angles surround us but sometimes are not easily seen.
Let's find an invisible **angle**. You will need a bottle or jar with a screw lid or cap and a marker pen.

- With your marker pen, draw a dot in the centre of the lid or cap.
- Draw another dot anywhere on the edge, then connect the two dots with a straight line. This is one arm of the angle.
- Slowly unscrew the lid about half a turn and watch the line. You will see that it moves around the dot in the centre.
- The point where the line stops is the other arm of the angle, with the centre dot being where the two arms meet. The centre dot is the vertex of the angle.

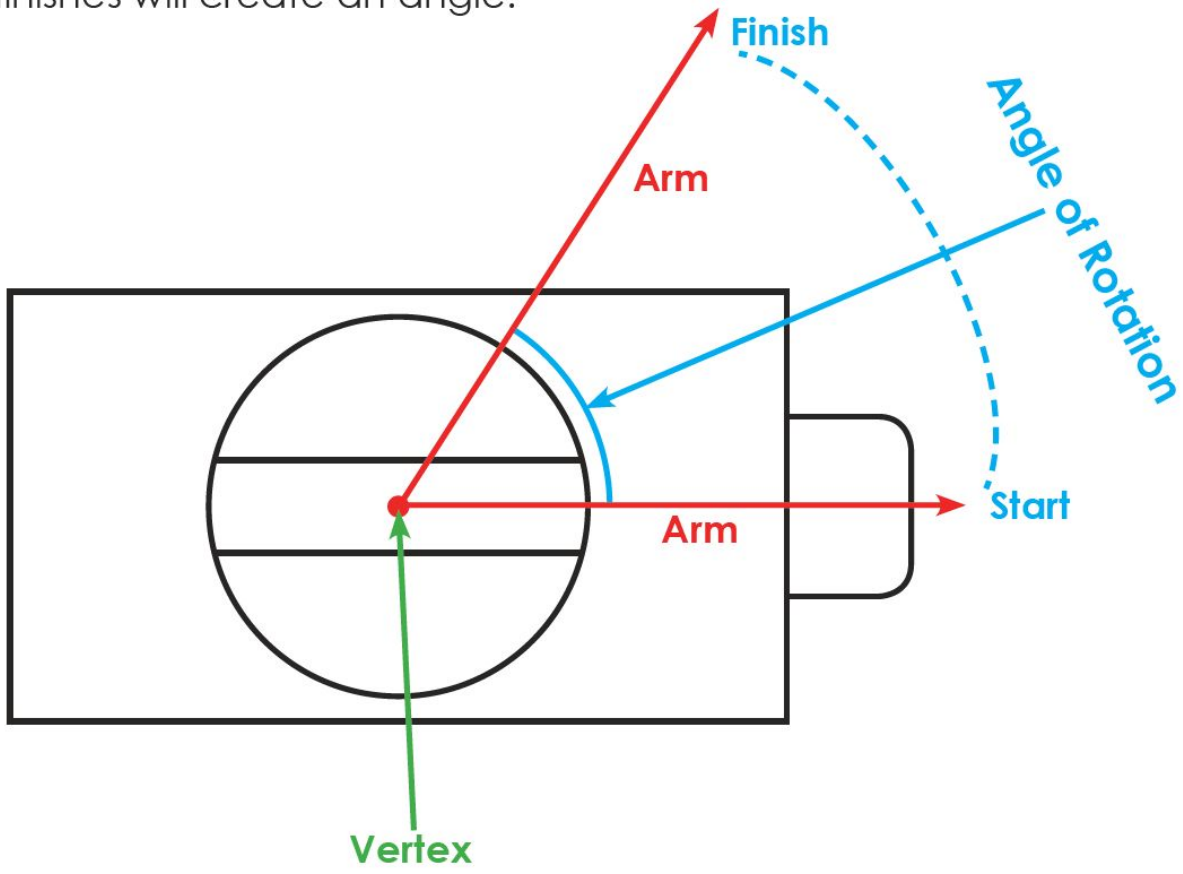
Angles of Rotation

An angle of rotation is a measurement of the angle, by which a figure is rotated around a fixed point, often the centre of a circle.

The lid rotating on the bottle creates the angle of rotation.

Here is another example:

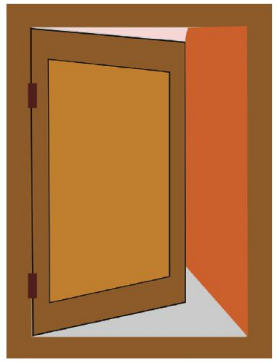
Look at a deadlock on a door. We **rotate** the knob so we can unlock the deadlock. The rotation of the knob from where it starts to where it finishes will create an angle.



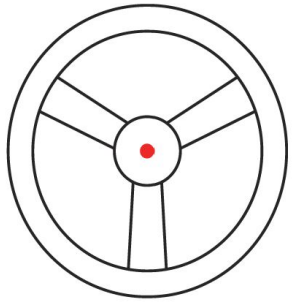
Activity 1

1. In the box below, draw an angle of rotation for each object then label its arms and vertex:

a. A door opening



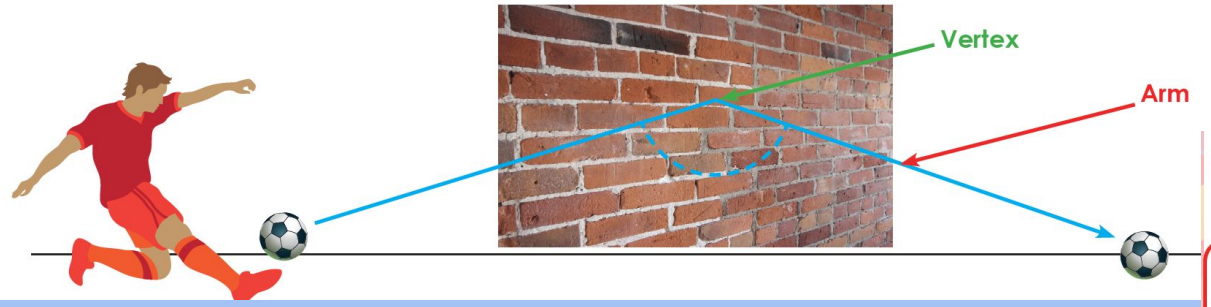
b. A car steering wheel



c. The arm on a pair of glasses

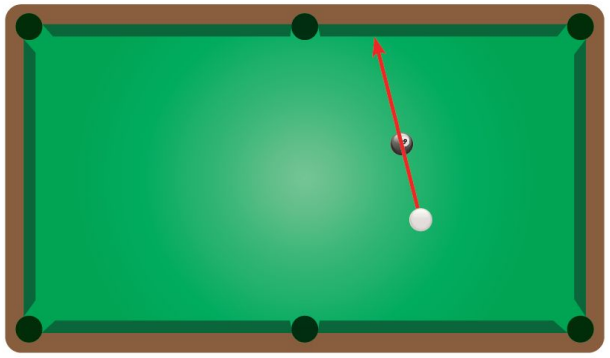
Angles of Rebound

We can find hidden angles in other forms as well. If we kick a ball against a wall, it will rebound off the wall. If we don't kick it straight at the wall, it won't rebound straight off the wall. This creates an angle of rebound.

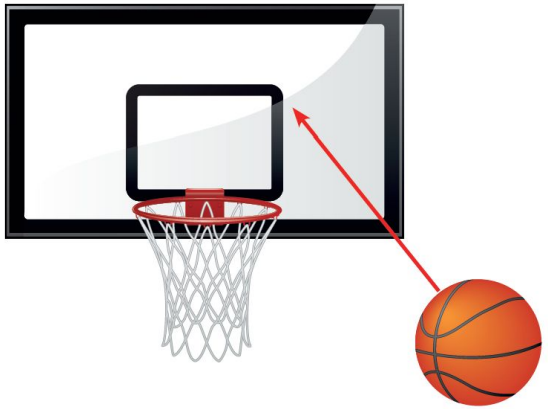


2. Can you find the angles of rebound in the following pictures? Draw the arms and label the vertex.
Hint: the angle of rebound off the surface is the same as the angle of the ball hitting the surface.

a. Pool ball and cushion on pool table

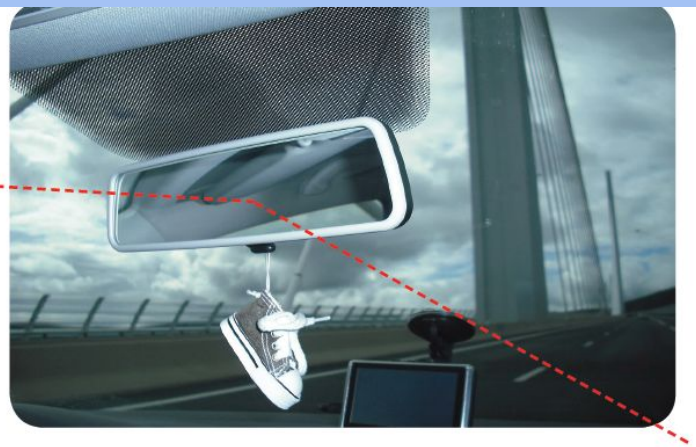


b. Basketball, hoop and backboard



Activity 1

Mirrors rely on an angle of rebound. When looking at the rear vision mirror in a car, we rely on an angle of rebound to see behind us. For example, the image opposite shows the angle of rebound when looking at the rear-view mirror from a certain position in the driver's seat. The invisible angle of rebound is drawn with dotted red lines.



3. Draw the angle of rebound of your vision when using a rear vision mirror in a car. Try this by sitting in the seat behind the driver's seat or, if given permission, sit in the driver's seat to get a better angle of rebound. You will need permission from your parent/supervisor and have them supervise you. Make sure you show the arms and the vertex.

Activity 1

4. Finish the sentences on the lines below.

a. An example of an invisible angle is _____.

b. Both arms of the angle meet at the _____.

c. The angle of rotation is _____.

How do we describe angles using mathematical language?

When measuring the size of an angle we use a unit of measure called the **degree**. The plural of **degree** is **degrees**. The short way of writing this is a small circle near the top of the number.
For example, **90 degrees** is written as **90°**.

5. Write these angles in long and short form. The first two are done for you.

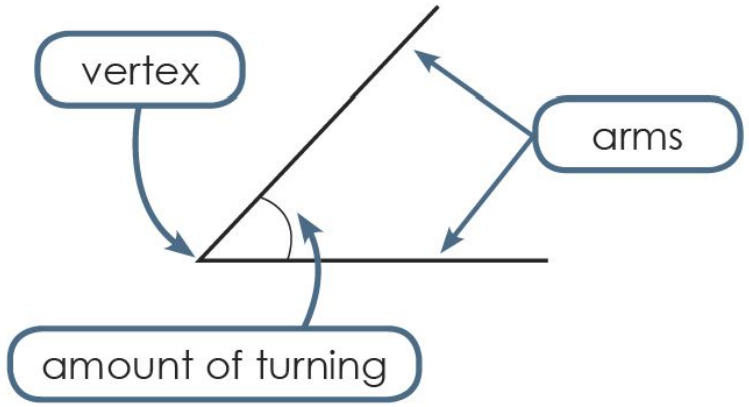
30 degrees	30°
186 degrees	186°
12 degrees	
	237°
	90°
360 degrees	

Click on the picture to revise rotation and learn about degrees.

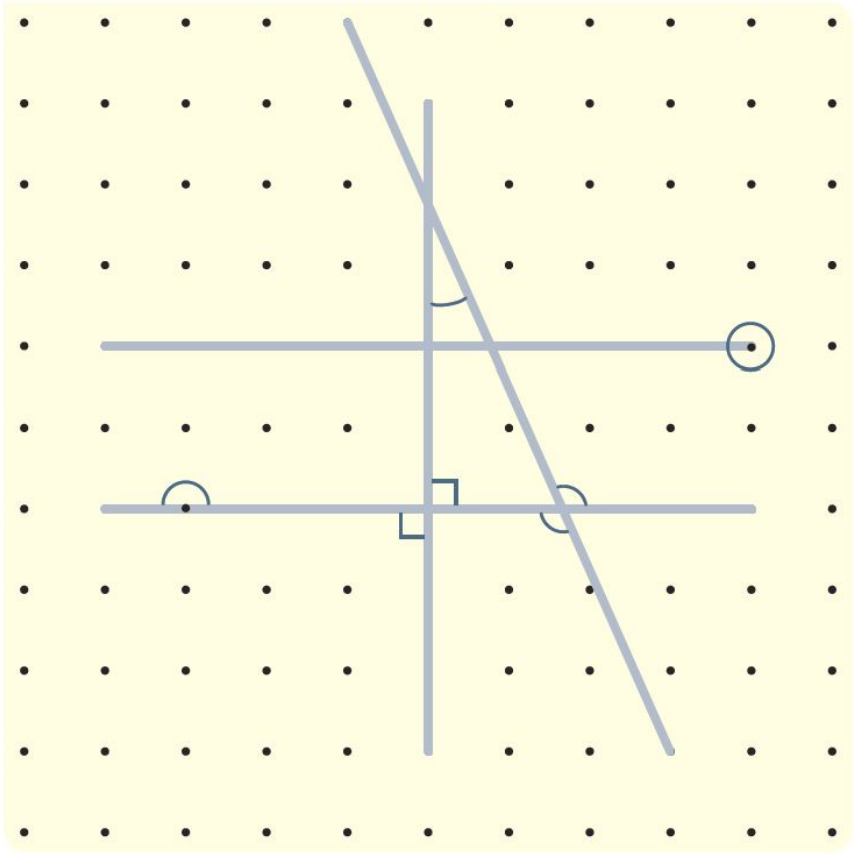
Activity 2

Have A Go!

Angles measure the amount of turning between two arms which join at a vertex. Multiple angles can be found in shapes, drawings and structures.



The diagram on the right shows several lines which intersect and form different types of angles. Some of the angles are marked in pink.

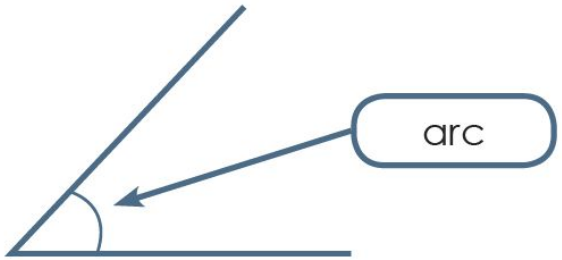


1. Find the right angles that have been marked and draw a **blue** circle around them.

2. Draw the square symbol on the six other right angles in the diagram.

Activity 2

Other types of angles are marked with a small curve known as an arc, as shown below. An arc is used to show all angles other than right angles.

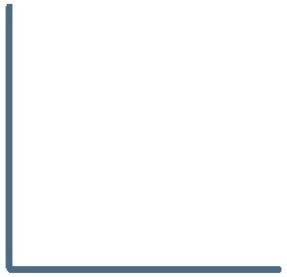


3. Find a **straight angle** and circle it **green**.

4. Draw and label in **green** another straight angle in the diagram.

5. Find the **angle of revolution** that has been marked and circle it **orange**.

6. In the diagram below, draw the square symbol in the angle to show it is a **right angle**.



Optional Weekly Challenge

Mathematics Investigation

angles, two-dimensional space

ARCHITECTURAL *angles*

Hands On - Angle Hunt

You will need:
Pencil, paper, ruler and informal measuring device

- [ ] 1. Look out your classroom window. Locate and estimate:
  2 x straight angles and 2 x reflex angles
- [ ] 2. Stand out the front of your classroom building. Based on the front view, locate and estimate:
  2 x obstuse angles and 2 x acute angles
- [ ] 3. Using a whiteboard marker and a whiteboard surface OR using a pencil and a piece of paper, draw 30 intersecting straight lines.
- [ ] 4. Measure or estimate 10 of the angles that you've drawn. Write the measured or estimated angle size in each of the 10 angles. Find the size of the remaining angles based on angle relationships.

Extension

Create a space rocket artwork using a range of polygons. Measure each angle and show these measurements in your final product.

@GIFTEDANDTALENTEDTEACHER

Want more Maths?

You can also go onto Mangahigh or Studyladder

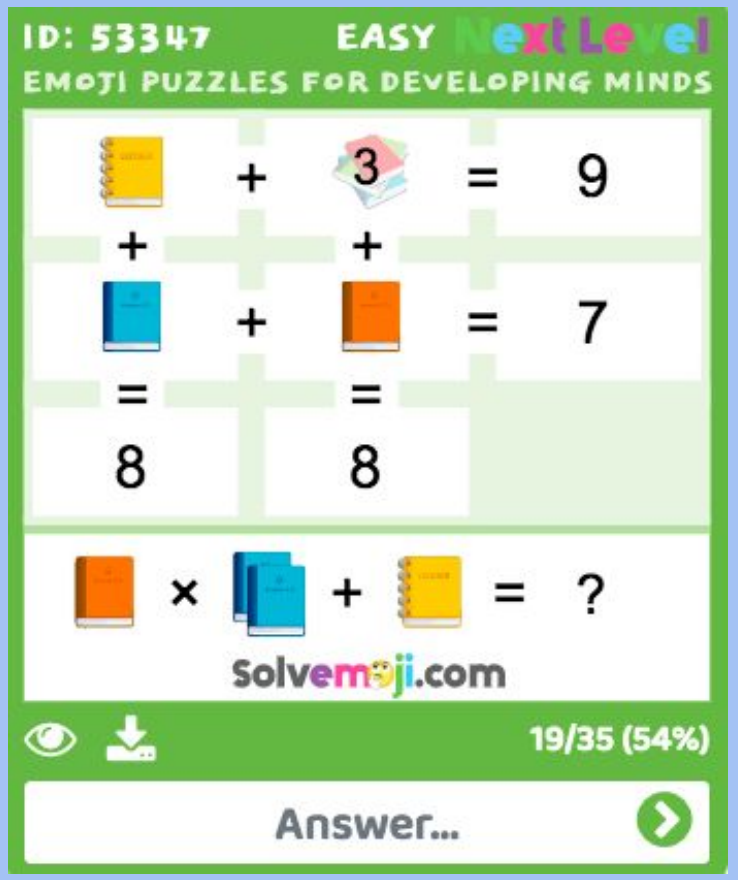
Ask your teacher if you need your login details.

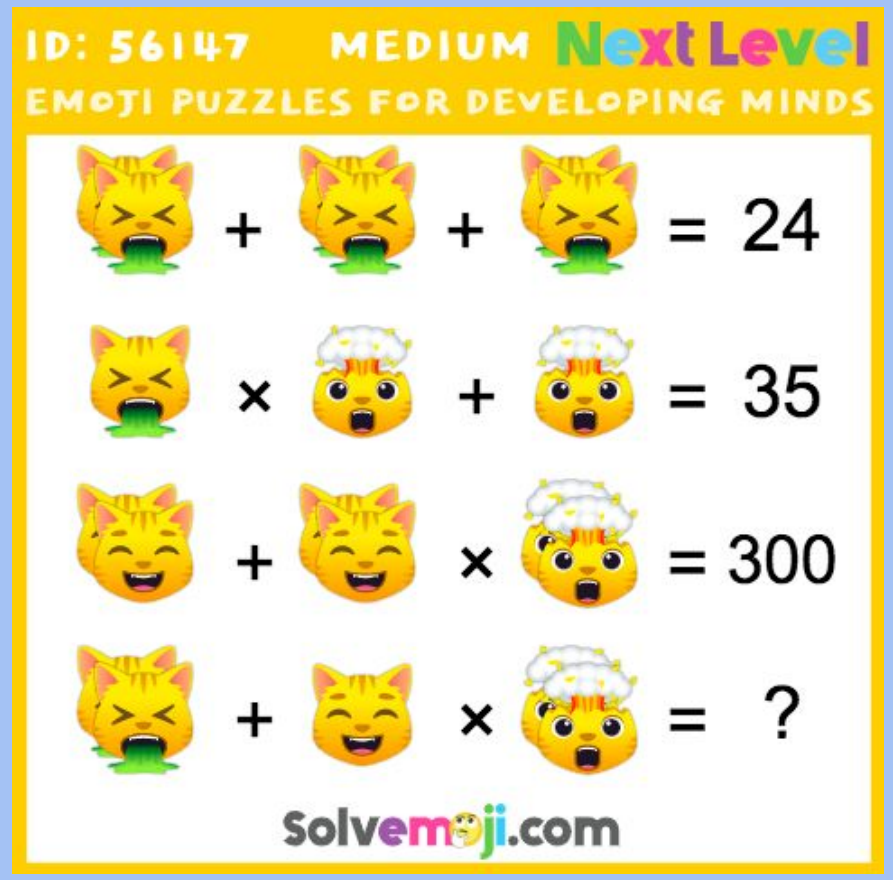
Wednesday

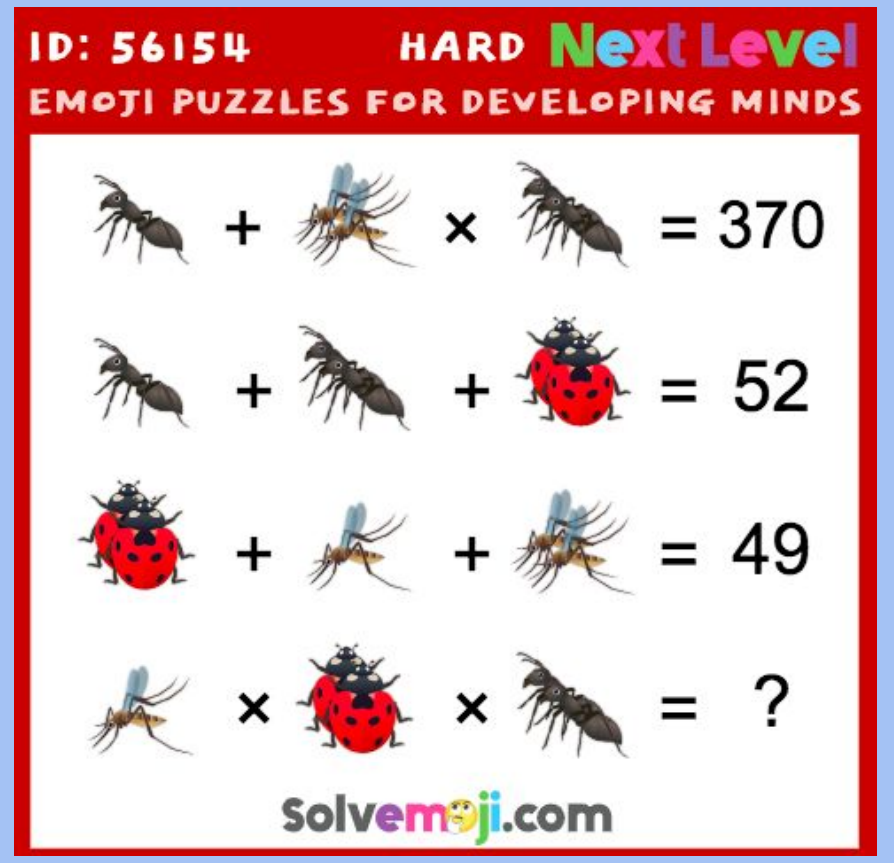
Complete your Speed Test and record your time in the table above.

Ignition Activity – choose your level

Answers for today will be posted at the end of the week







Activity 1

In the previous lesson, all the numbers used in each of the addition and subtraction algorithms had the same number of decimal places. We are now going to learn how to add and subtract numbers with a different number of decimal places.

Read through the examples below.

Addition

38.67 + 4.9

$$\begin{array}{r} {}^{1}3\ {}^{1}8.67 \\ +\ \ 4.90 \\ \hline 43.57 \end{array}$$

Subtraction

572.32 - 23

$$\begin{array}{r} 5\ {}^{6}\not{7}\ {}^{1}2.32 \\ -\ \ 23.00 \\ \hline 549.32 \end{array}$$

1. Line up the decimal points.

2. Put in the zeros so the numbers have the same number of decimal places.

3. You are now ready to do your addition or subtraction.

Activity 1

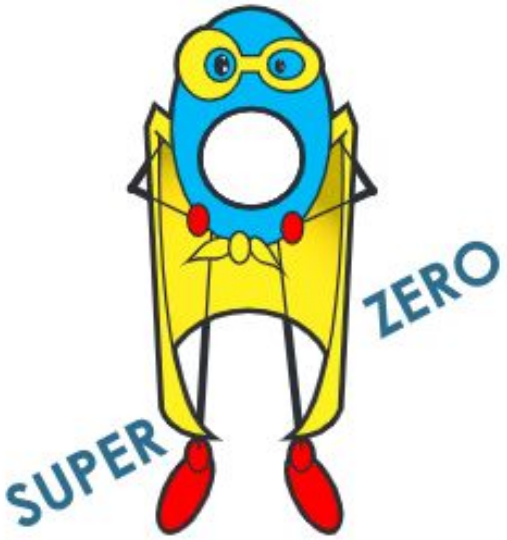
Why do we add zeros in algorithms?

It helps us to line up the decimal numbers when we are adding or subtracting them in an algorithm. Adding a zero at the end does not change the value of the decimal.

Look at the number: **32.8**

There is no number in the hundredths place. Adding a zero tells us that there are no hundredths in this decimal.

The number becomes: **32.80**



Below are some addition and subtraction number sentences using decimal numbers. Write an algorithm for each in the boxes on the next page. Add zeros where necessary to help you line up the decimal places. You may need to use trading to determine the answer.

a. 12.5 + 3.45

b. 45.46 + 23.229

c. 872.3 + 62

d. 420.355 + 102.8

e. 8.41 - 2.5

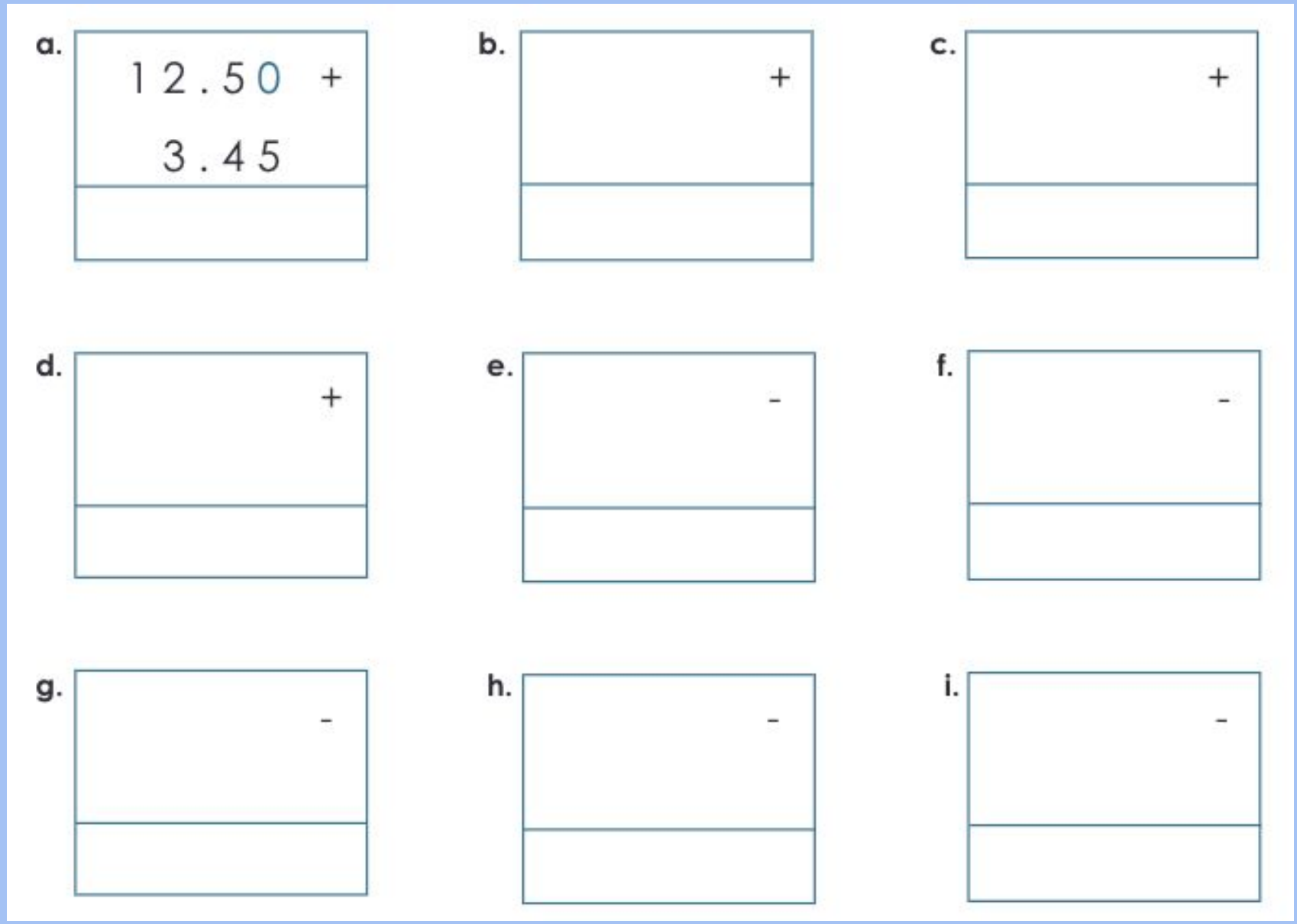
f. 83.2 - 56.211

g. 453.98 - 14.6

h. 957.884 - 76.35

i. 693.429 - 655.3

Activity 1



Activity 2

Now use your decimal number strategies to answer the questions below.

Read through the table showing the length of railway tunnels from around the world.

Tunnel	Country	Length in km
Channel Tunnel	England/France	50.5
Gotthard Base Tunnel	Switzerland	57
Guadarrama	Spain	28.418
New Guanjiao Tunnel	China	32.645
Seikan	Japan	53.85

a. Round the length of the following tunnels to the nearest whole number.

New Guanjiao Tunnel _____ km

Guadarrama _____ km

Seikan _____ km

Activity 2

b. The lengths of which two tunnels add up to 104.35 km?

_____ _____

c. Estimate the combined total of all the tunnels. Circle the closest answer from the options below.

150 km 300 km 225 km 250 km

d. Explain the steps you went through to solve **question c**.

_____

_____

_____

Activity 2

e. What is the difference between the longest and shortest tunnel listed in the table?

_____ km

f. In her trip to Spain, Josie caught a train through the Guadarrama Tunnel. Later she went to the Swiss Alps and travelled by train through the Gotthard Base Tunnel. What distance did she travel altogether through both tunnels?

_____ km

Thursday

Complete your Speed Test and record your time in the table above.

Ignition Activity

Today's number is **7289**

Day: 244

1. In words
2. 5 more
3. 20 less
4. Add 12.
5. Round to nearest 10
6. Odd or even?
7. Complete the pattern, add **2**: 7289, ___, ___, ___
8. Prime or composite?
9. Divisible by 10?
10. Half it.

Daily Speed Test

What you will need:

- Timer (if you don't have one on a device use this: https://www.online-stopwatch.com/)
- Piece of paper
- Pencil

What to do:

- Select a times table that you would like to improve on (**must be between 6 and 12**)
- Set the timer and begin writing your times table out from start to finish. E.g. **0 x 7** = 0 all the way through to **12 x 7** = 84
- Press stop on the timer when you have finished and record your time
- Consider your time and set an achievable goal for the next day. E.g. *If you got 1 minute 20 seconds you might aim for 1 minute 15 seconds the next day.*
- **Record your times in the table below**

Monday	Tuesday	Wednesday	Thursday	Friday

Activity 1

Lesson 2

Using A Protractor

In this lesson you will be learning how to measure angles of up to 360° using a protractor.

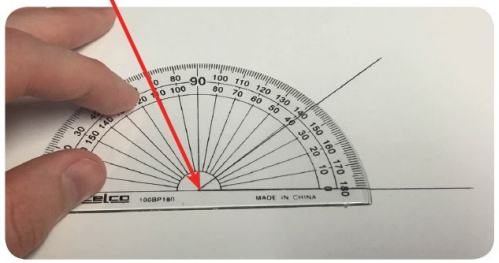
Have A Go!

So far you have learnt about angles of rotation and rebounds, and how we can describe them using mathematical language. This lesson will focus on measuring angles using measuring devices/instruments.

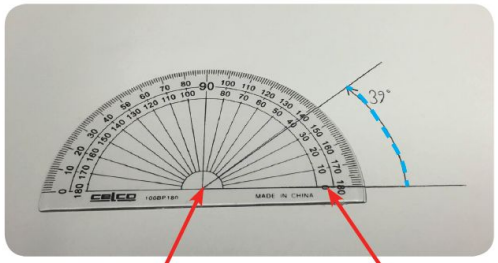
We measure angles using a **protractor**.

When using a protractor to measure angles, we must place the centre point of the protractor on the **vertex** of the angle.

a. Place the base line marked 0° on one arm of the angle. The vertex of the angle must align with the centre point of the base line.



b. Look at the point where the other arm of the angle passes through the edge of the protractor. The number that the arm passes through is the angle in degrees. In the picture below, the angle is 39°.



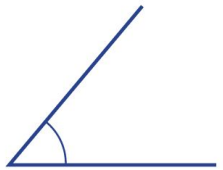
Angles

Start at 6:10 on the video for using a measuring angles with a protractor.

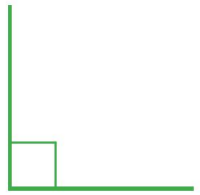
Activity 1

1. Measure these angles using a protractor. Write the answer in the vertex.

a.



b.



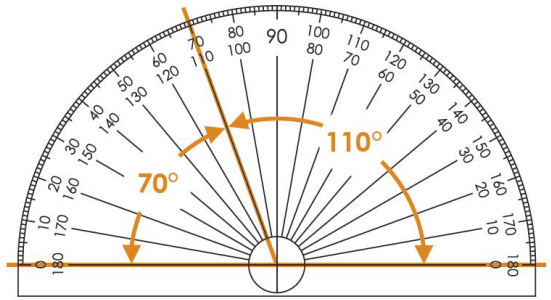
c.

d.

e.

f.

Be careful! Protractors have two sets of numbers - an outer scale and an inner scale. One set goes from 0° to 180°. The other set goes the opposite way around the protractor. It is important to use the correct set. When measuring an angle, ask yourself: should the angle be larger or smaller than 90°?



What can you do if the arms of the angle do not extend far enough for you to measure with the protractor?

2. Using a ruler, draw along the arms so they extend far enough to measure. Then measure the angles.

a.

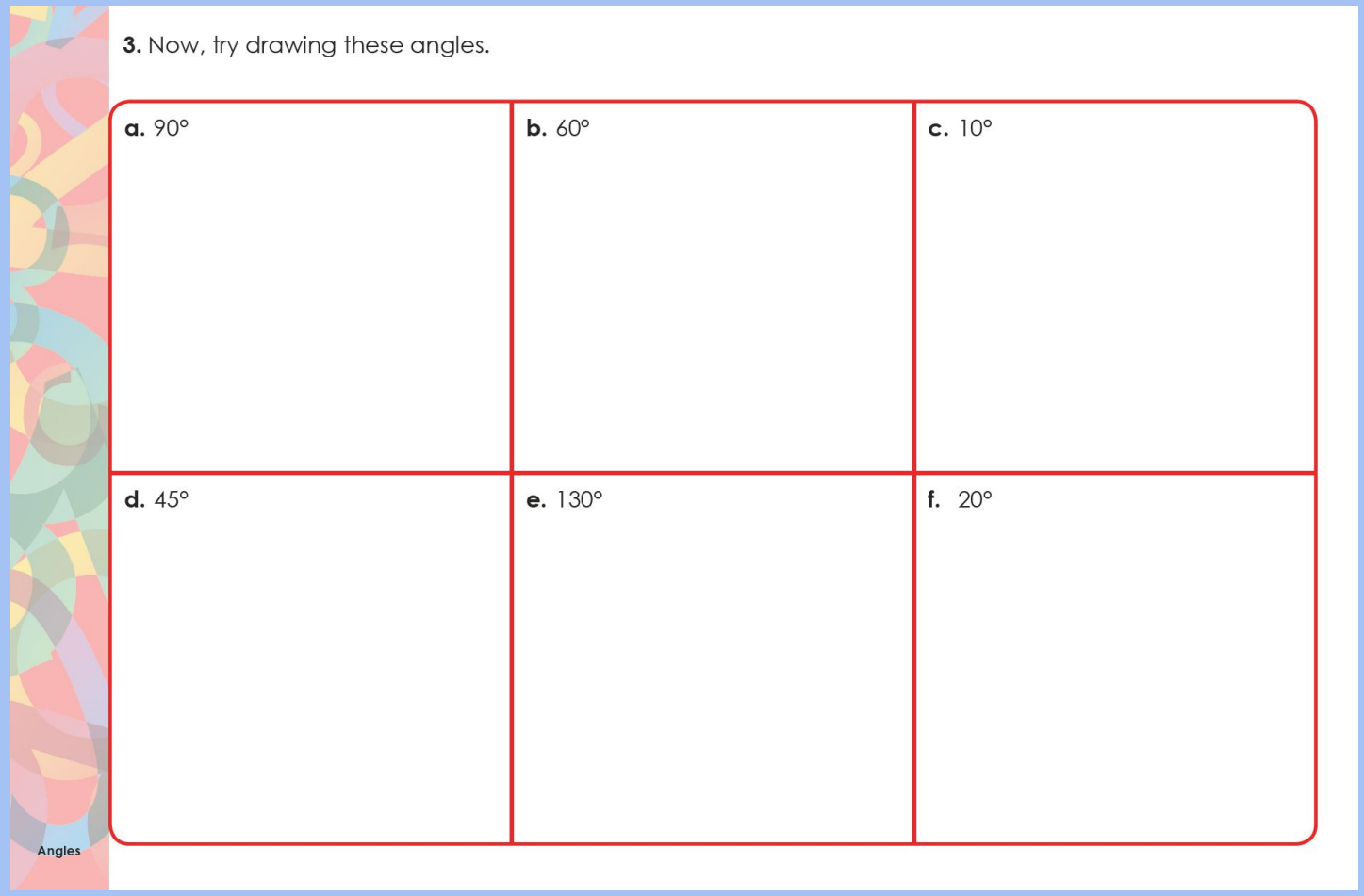
b.

c.

Activity 1

Drawing Angles

Constructing angles using a protractor is simple. Watch the video to remind you.



3. Now, try drawing these angles.

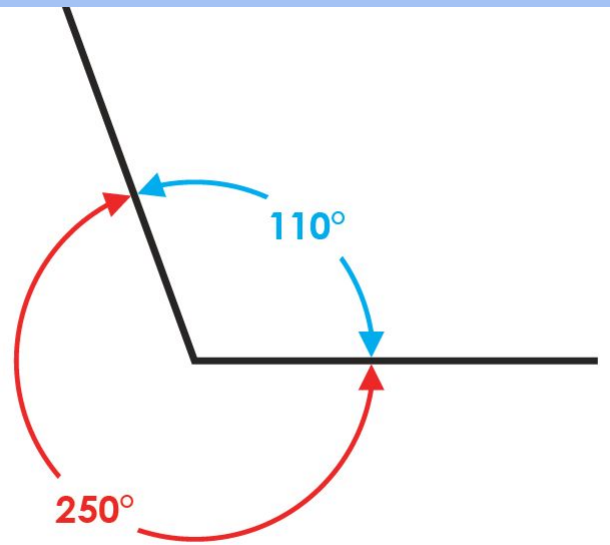
a. 90°	**b.** 60°	**c.** 10°
d. 45°	**e.** 130°	**f.** 20°

Angles

Activity 1

Drawing reflex angles that are greater than 180° is simple once you know how to. For example, to draw an angle of 250°:

a. Subtract 250° from 360°, (there are 360° in one revolution). The answer is 110°.
b. Draw an angle of 110° (seen in blue)
c. The opposite angle will be 250° (seen in red)



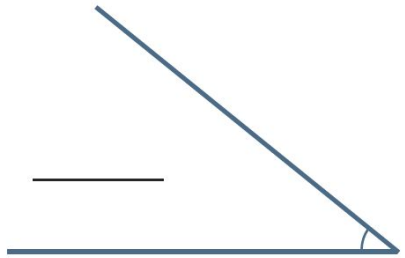
4. Now, try drawing these reflex angles.

a. 290°	**b.** 350°	**c.** 190°

Activity 1

Look at a protractor and estimate the size of each of the following angles. Use a protractor to measure each angle to the closest degree and write the angle size on the line inside each angle. Label the angle type underneath.

1. Estimate: _____

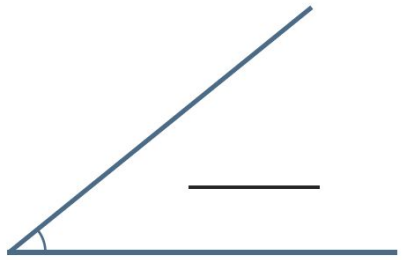


Angle type: _____

2. Estimate: _____

Angle type: _____

3. Estimate: _____



Angle type: _____

4. Estimate: _____

Angle type: _____

Activity 1

We can use what we know about types of angles to check our work.

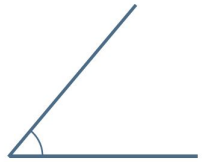
1. Draw lines to match each of the following angle types to its description.

obtuse angle	less than 90^0
acute angle	exactly 90^0
straight angle	between 90^0 and 180^0
angle of revolution	exactly 180^0
right angle	between 180^0 and 360^0
reflex angle	exactly 360^0

Felicity used her protractor to measure this angle. The measurement she wrote was 130^0.

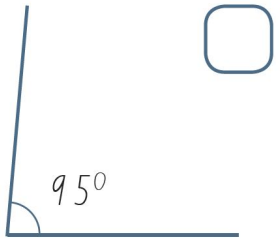
When she checked her work, she realised that her measurement was incorrect because the angle is an acute angle, which must measure less than 90^0.

Felicity realised she had read the wrong scale on her protractor. When she measured the angle again, she discovered that it measured 50^0.



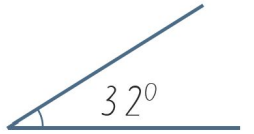
2. For each angle below, use your knowledge of the size of angles to check the rest of Felicity's measurements. Tick the box next to the angle if you think it is a correct measurement. Cross the box if you think it is an incorrect measurement. Give reasons for your decision in the space provided.

a.



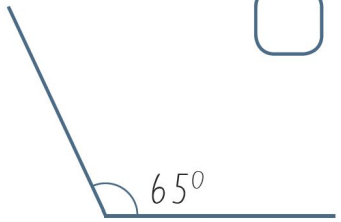
Reason: _____

b.



Reason: _____

c.



Reason: _____

Lesson 2

Adjacent Angles

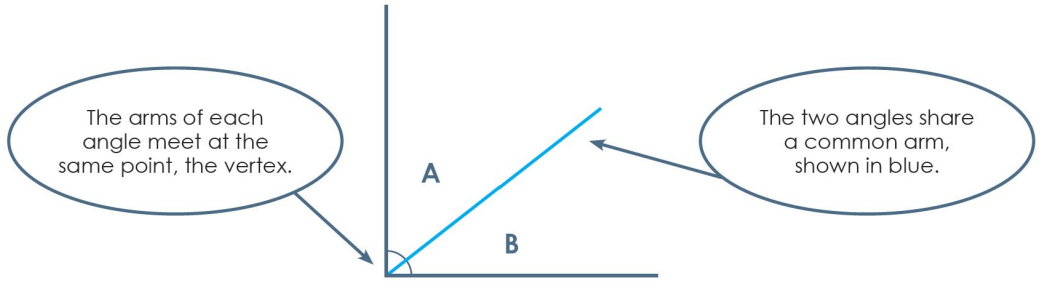
In this lesson you will be learning about adjacent angles.

Have A Go!

Adjacent angles are two angles that meet at a point and share a common arm and a common vertex.

Look at these two angles, marked angle A and angle B.

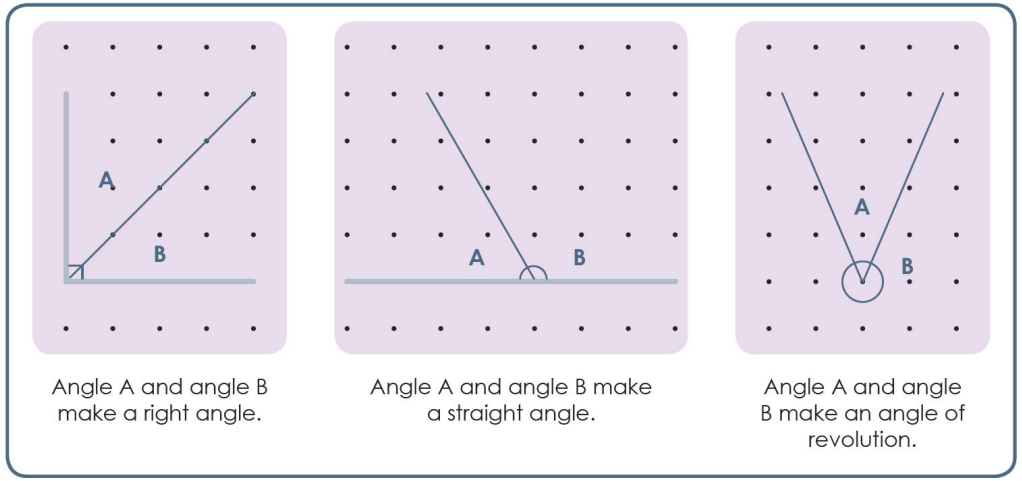
Did you know the word adjacent means 'next to'? The red car is adjacent to the yellow car.



Angle A and angle B are adjacent angles.

Activity 2

Adjacent angles can form right angles, straight angles and angles of revolution, as shown in the diagram below. They can also form acute angles, obtuse angles and reflex angles.



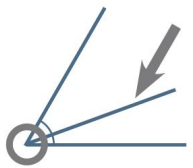
Angle A and angle B make a right angle.

Angle A and angle B make a straight angle.

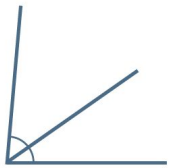
Angle A and angle B make an angle of revolution.

1. For each angle below, draw an arrow pointing to the common arm and draw a circle around the common vertex. The first one has been done for you.

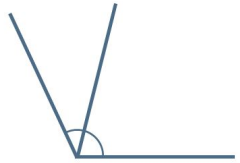
a.



b.



c.

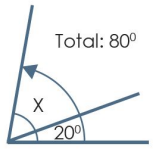


d.

Activity 2

2. In the adjacent angles below, the combined size of the two angles and the size of one angle have been given. Use subtraction to work out the size of angle X. The first one has been done for you.

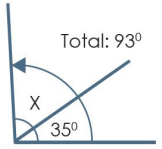
a.



80 - 20 = 60

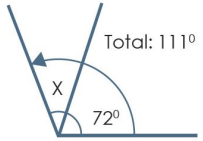
Angle X: 60⁰

b.



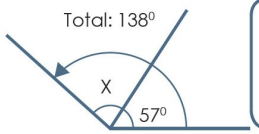
Angle X: _____

c.



Angle X: _____

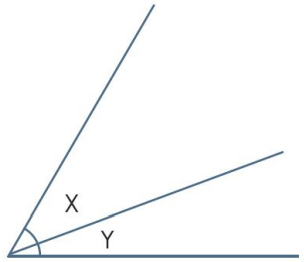
d.



Angle X: _____

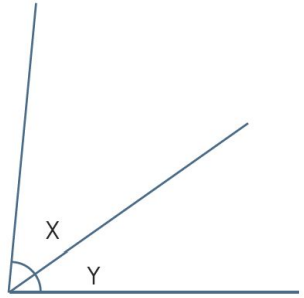
3. Use a protractor to measure the following angles. Write the measurement of each angle, and then the total of the adjacent angles combined.

a.



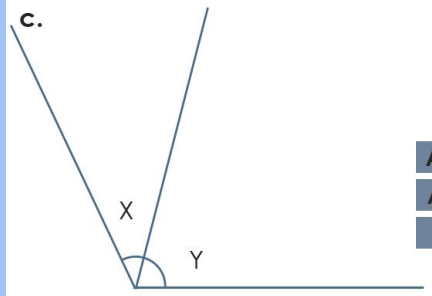
Angle X	
Angle Y	
Total	

b.



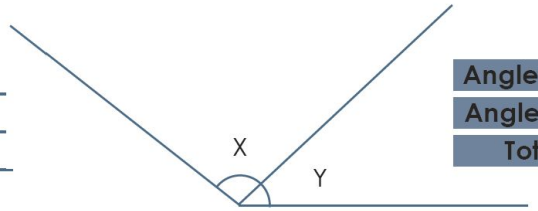
Angle X	
Angle Y	
Total	

c.



Angle X	
Angle Y	
Total	

d.



Angle X	
Angle Y	
Total	

Start at 6:58 on the video for using a measuring angles with a protractor.

Lesson 3

Vertically Opposite Angles

In this lesson you will be learning about the properties of vertically opposite angles.

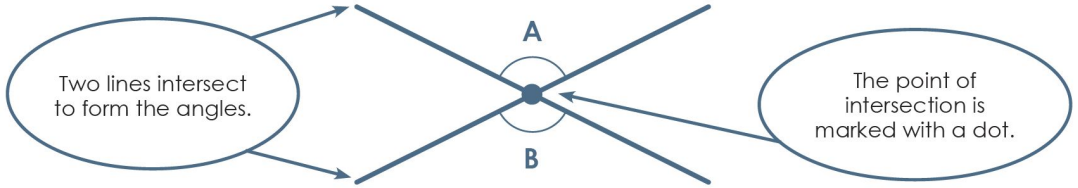
Have A Go!

When two lines intersect, four angles are formed at the point of intersection. The angles opposite each other at the point of intersection are called **vertically opposite angles**.

Look at these two angles, labelled A and B.

Intersecting lines are straight lines that cross over each other at a point, forming an x-shape.

Vertically opposite angles are always the same size. For example, the vertically opposite angle of a 65° angle is also 65°.

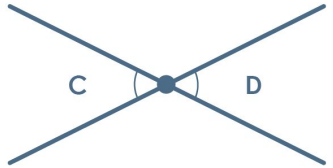


Angle A and angle B are called vertically opposite angles.

Activity 2

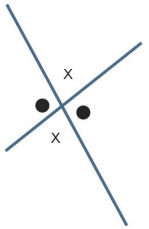
Start at 6:58 on the video for working out an unknown angle.

The other two angles in this set of intersecting lines, marked angle C and angle D, are also vertically opposite angles.

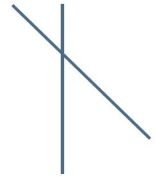


1. For each set of intersecting lines below, mark one pair of vertically opposite angles with crosses and the other pair of vertically opposite angles with dots. The first one has been done for you.

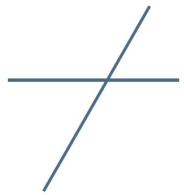
a.



b.



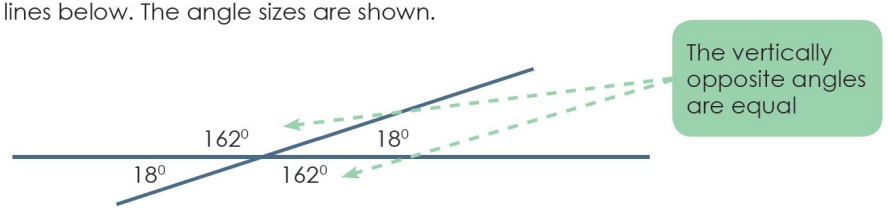
c.



d.

Activity 2

Look at the intersecting lines below. The angle sizes are shown.

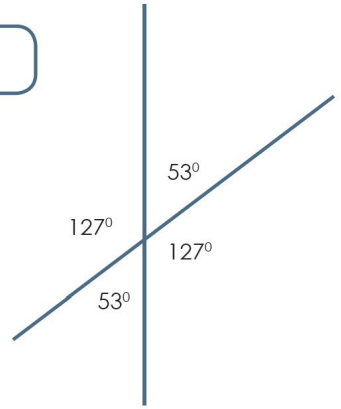


If we add the size of all of these angles together, they will equal 360⁰. The angles formed at the point where two lines intersect will always equal 360⁰ when added together.

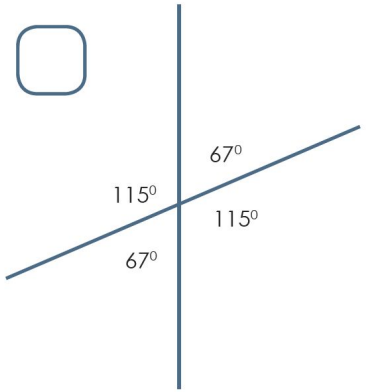
We can use this rule to check our work when we are measuring angles.

2. Belinda has been measuring some angles, but she is worried she has made an error. Check Belinda's work by using the addition to 360⁰ rule. Tick the box if her measurements total 360⁰. Cross the box if her measurements do not total 360⁰. Use your protractor to measure any angles that are incorrectly labelled, then cross out the incorrect measurement and write the correct measurement next to it.

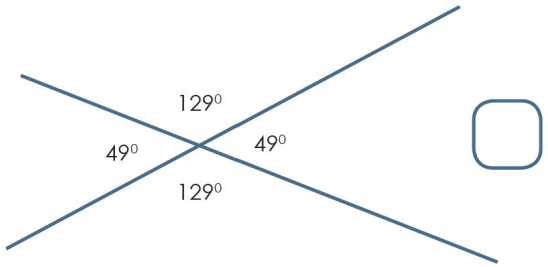
a. ☐



b. ☐



c.



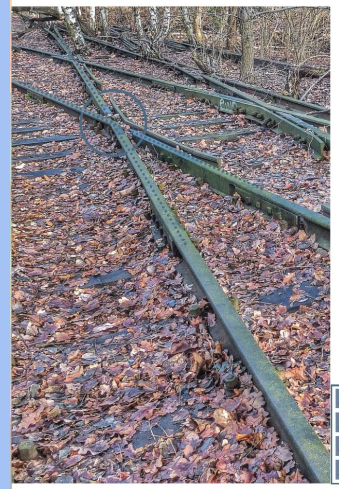
☐

Start at 6:58 on the video for working out an unknown angle.

3. The pictures below contain a circled set of intersecting lines that create vertically opposite angles.

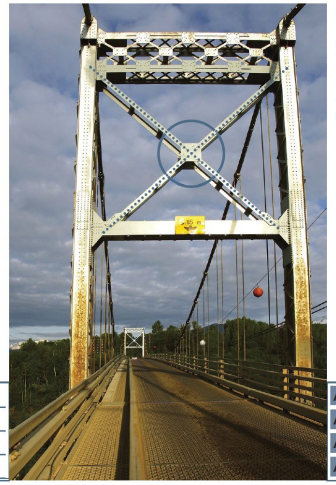
- Label the angles **A**, **B**, **C** and **D**.
- Measure angle **A** with a protractor and write the angle size in the box.
- Using this information, calculate the other angles. Write their angle sizes in the boxes.

a.



Angle A	
Angle B	
Angle C	
Angle D	

b.



Note: The lines intersect underneath the square plate in this image.

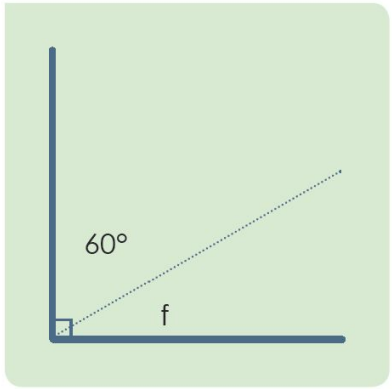
Angle A	
Angle B	
Angle C	
Angle D	

Activity 2

Have A Go!

We can calculate the size of unknown angles by remembering some rules about angles.

How can we calculate the size of angle **f** below?



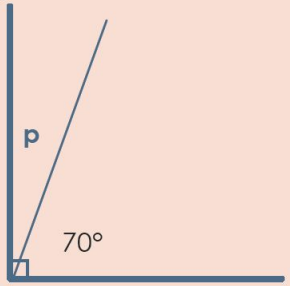
The small square in the corner shows that the combined angle size of the two angles is 90^0 because they are adjacent and form a right angle. We can use this information to work out the value of angle f.

If one angle is 60°, then the adjacent angle must be 30° because 90 - 60 = 30.

Start at 6:58 on the video for working out an unknown angle.

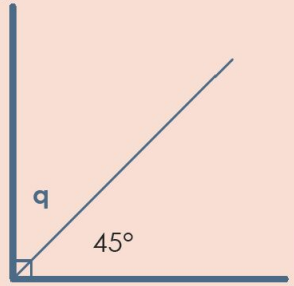
1. Use what you know about the size of a right angle to help you calculate the size of the unknown adjacent angle in each example below. Write your answer in the box provided.

a.



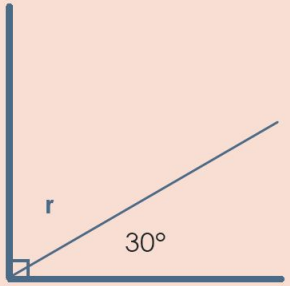
p =

b.



q =

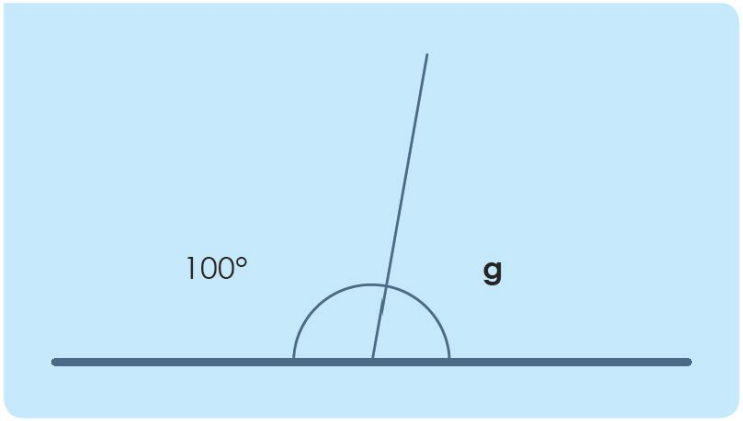
c.



r =

Activity 2

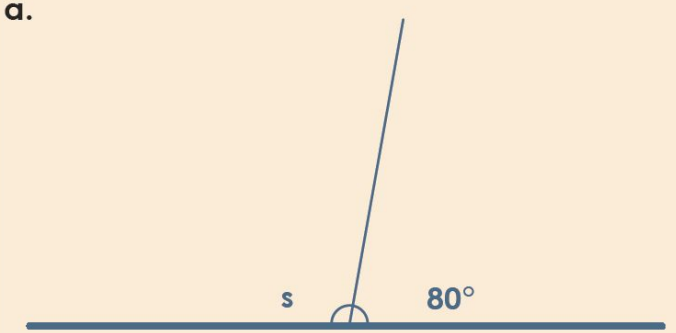
How can we calculate the size of angle **g** below?



The two angles below combine to form a straight angle. We know that a straight angle is 180°. If one angle in a straight angle is 100°, then the adjacent angle must be 80°, because 180 - 100 = 80.

2. Use what you know about the size of a straight angle to help you calculate the size of the unknown adjacent angle in each example below. Write your answer in the box provided.

a.



s =

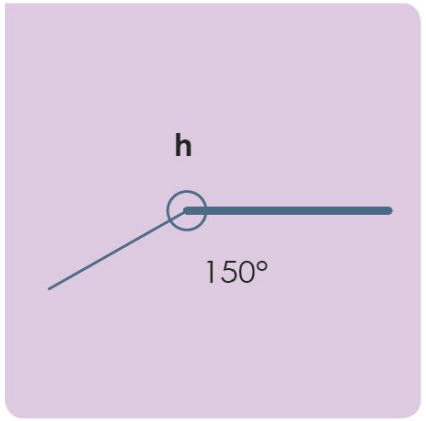
b.

t =

Start at 6:58 on the video for working out an unknown angle.

Activity 2

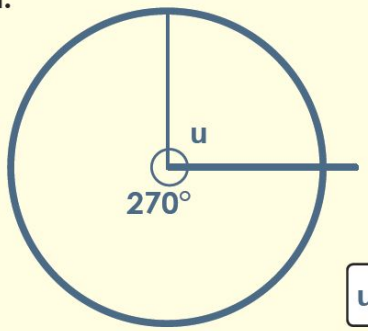
How can we calculate the value of angle **h** below?



We know that the two angles combine to form an angle of revolution, which is 360°. If one angle is 150°, then the adjacent angle must be 210°, because 360 - 150 = 210.

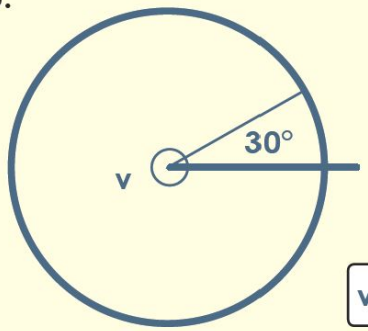
3. Use what you know about the size of an angle of revolution to help you calculate the size of the unknown adjacent angle in each example below. Write your answer in the box provided.

a.



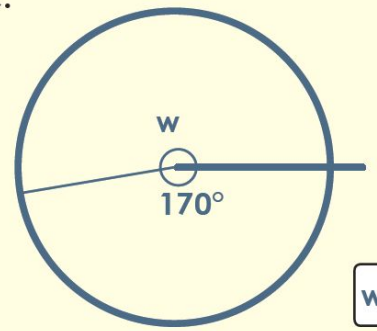
u =

b.



v =

c.



w =

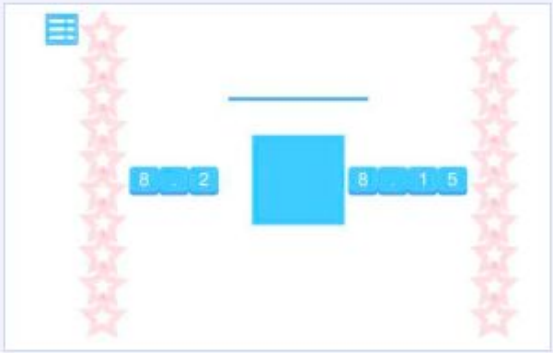
Start at 6:58 on the video for working out an unknown angle.

Friday

Complete your Speed Test and record your time in the table above.

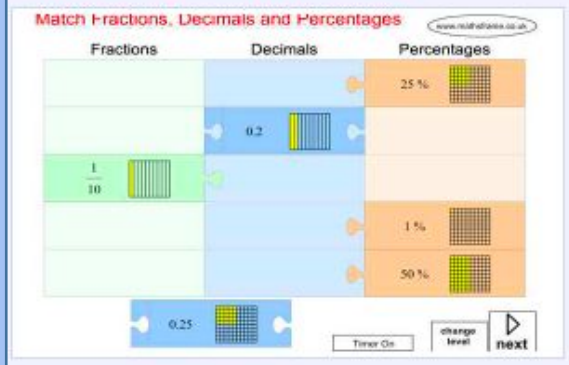
Ignition Activity – choose your level

Answers for today will be posted at the end of the week



Compare Decimals

Draw greater than and less than signs before the time bar runs out to compare decimals. Draw in the blue area.



Match Fractions, Decimals and Percentages

A flexible matching game which can help you to recognise equivalence of fractions, decimals and percentages. Displays well on interactive whiteboard.

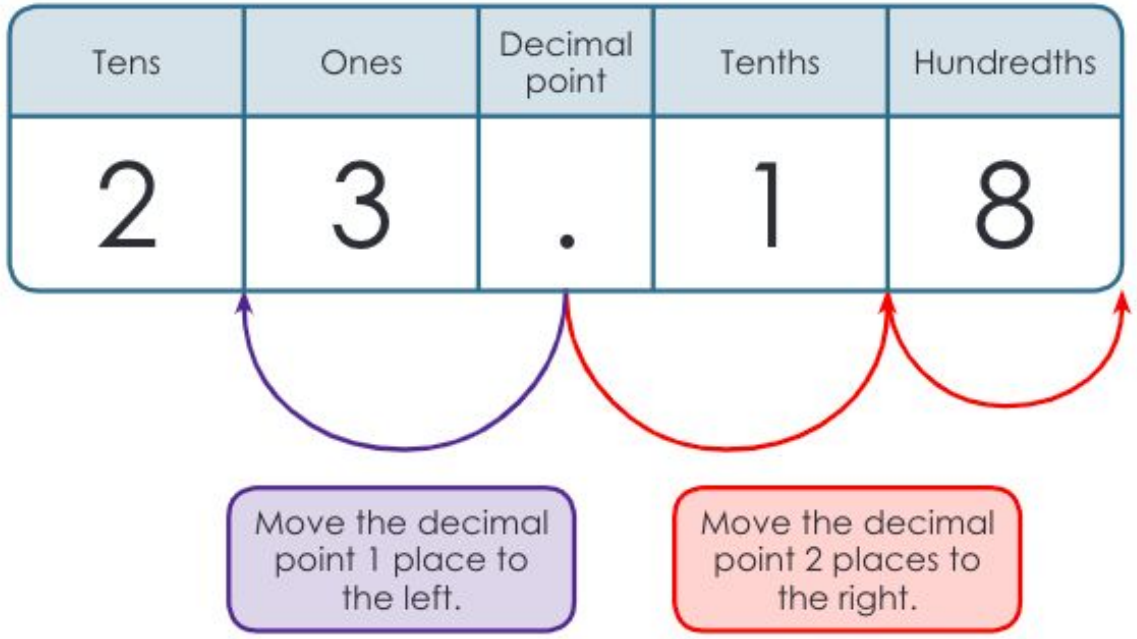
Decimals Jeopardy

Play in teams or on your own against the clock. The questions on this quiz involve the addition, subtraction and multiplication of decimals. Suitable for 10 - 12 year olds.

Activity 1

The position of the decimal point is important in order to give each digit its correct place value.

What would happen if you changed the position of the decimal point in this number?



2. Write the new number made from the digits above if you moved the decimal point:

a. 2 places to the right: _____

Is the number larger or smaller than the original number? _____

b. 1 place to the left: _____

Is the number larger or smaller than the original number? _____

Activity 1

Accurately counting the number of decimal places in numbers will help you to multiply decimals.

How many decimal places are in the number below?

Tens	Ones	Decimal point	Tenths	Hundredths	Thousandths
2	6	.	7	8	4

There are 3 digits to the right of the decimal point. These are tenths, hundredths and thousandths.

This means there are three **decimal places** in this number.

3. How many decimal places do each of the following numbers have? Remember to count the amount of numbers after the decimal point. The first one has been completed for you.

a. 2.19 has 2 decimal places.

b. 34.314 has _____ decimal places.

c. 982.5 has _____ decimal place.

d. 9.861 has _____ decimal places.

Activity 1

Let's look at some different strategies you can use to multiply decimals.

Strategy 1 - Repeated addition

Find the answer to a multiplication problem by adding the same number multiple times.

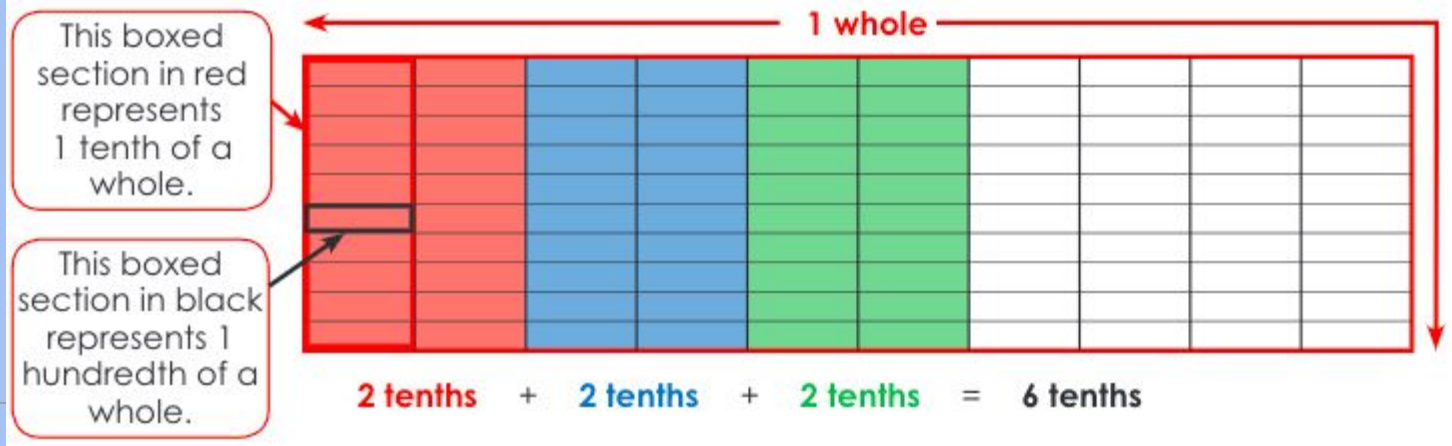
Look at this example.

3 × 0.2

3 × 0.2 is the same as adding 0.2 three times.

0.2 + 0.2 + 0.2 = 0.6

so, **3 × 0.2 = 0.6**



Activity 1

Here are some more examples of repeated addition:

3 × 0.15

3 × 0.15 is the same as adding 0.15 three times.

0.15 + 0.15 + 0.15 = 0.45

so, **3 × 0.15 = 0.45**

3 × 0.004

3 x 0.004 is the same as adding 0.004 three times.

0.004 + 0.004 + 0.004 = 0.012

so, **3 × 0.004 = 0.012**

4. Write each multiplication number sentence as repeated addition and write your answer.

a. 0.16 × 2 = _____	**b.** 0.007 × 3 = _____	**c.** 4 × 0.2 = _____

Activity 1

We can also use **partitioning** to multiply decimal numbers.

Strategy 2 - Partitioning

Multiply the whole numbers and decimals separately before adding them together.

Look at the example.

4 × 2.1

• Multiply the whole numbers first. e.g. Multiply 4 by 2.	**4 × 2 = 8**
• Next, multiply the decimal. e.g. Multiply 4 by 0.1.	**4 × 0.1 = 0.4**
• Add the two products together to get your answer. e.g. 8 + 0.4 =	**8 + 0.4 = 8.4**

Smart Check

We know 4 × 2 is 8 so we can estimate the answer will not be less than 8. It will be a bit more than 8 as 2.1 is more than 2 but less than 3.
The answer we have is 8.4. Does this make sense? Yes.

Activity 1

5. Use partitioning to solve each of the following problems. The first one has been done for you.

a. 4.8 × 11 =	**b.** 1.5 × 9 =	**c.** 6 × 2.3 =	**d.** 85 × 6.1 =
4 x 11 = 44 11 x 0.8 = 11 x 8 = 88 = 8.8 44 + 8.8 = 52.8			
e. 4.5 × 3 =	**f.** 72 × 5.2 =	**g.** 64 × 2.2 =	**h.** 6.12 × 33 =

Activity 2

Strategy 3 - Ignore the decimal

Multiply the numbers without the decimal point then add the decimal point in the answer.

Look at the example below.

3.5 × 7

- Take out the decimal points and multiply the numbers.

35 x 7 =245

$$\begin{array}{r} {}^{3}35\times \\ 7 \\ \hline 245 \end{array}$$

- Count the number of decimal places in both numbers you are multiplying.

e.g. 3.5 has 1 decimal place.
7 has 0 decimal places.
There is 1 decimal place altogether.

3.5 and 7 = 1 decimal place

- Put the decimal point in the answer, make sure you add in the correct number of decimal places you counted earlier. Start from the end of the number and move left.

e.g. Add 1 decimal place to 245. Move the point 1 place to the left.

245 = 24.5

The answer is 24.5

Activity 2

6. How many decimal places should be in each product? Put the decimal point in the correct place for each of the products.

a. 7 x 2.5 = 1 7 5

b. 3.91 x 8 = 3 1 2 8

c. 15 x 8.51 = 1 2 7 6 5

d. 61 x 21.25 = 1 2 9 6 2 5

e. 88.21 x 49 = 4 3 2 2 2 9

f. 54.327 x 55 = 2 9 8 7 9 8 5

7. Complete the following decimal problems using the **ignore the decimal strategy**.

a. 3 x 9.6 = _____	b. 4 x 6.82 = _____	c. 7.159 x 5 = _____

Personal Passion Project

Week 1 Term 4

This week you will choose your own topic of interest. It can be anything that you would love to find out more about and present to your teacher and classmates.

It may include:

- Your favourite animal or a unique species you know very little about.
- A scientific phenomenon like weather, experiments, gravity etc.
- An environmental topic, like natural disasters, rainforests or pollution.
- Something to do with your favourite sport, food, colour, hobbie or famous person.

CLICK HERE and HERE to watch some videos of personal passion projects.

IT CAN BE ANYTHING YOU LIKE!

MONDAY

Monday

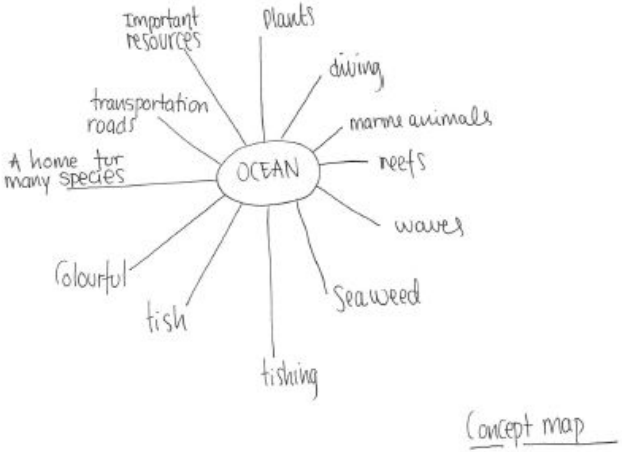
Decide on your topic. On the following slide make a colourful collage of pictures that represent this topic.

For example, if my topic was ‘OCEANS’, my collage might look like this:

Define your topic

What are the key words of the topic you are presenting?
Define these key terms:

Now brainstorm all the words you think might relate to your topic in a concept map on the following slide. For example, my concept map on oceans might look like this:



My Concept Map

TUESDAY

What do you want to know?

What about your topic of interest do you want to find out more about?

Come up with 3 great questions that you can find out. For example, one of my questions for my ocean passion project might be: 'How many different species of fish live in Australian oceans?'

Make sure your questions are asking you to find out what you don't know already.

Questions:

1.

2.

3.

WEDNESDAY

Research Time!

Do some research and answer your 3 questions in as much detail as you can. You might like to include pictures and diagrams that help explain your answers.

Question 1: Research and Answer

Question 2: Research and Answer

Question 3: Research and Answer

THURSDAY

Let's Experiment!

Find an experiment you can do at home that links to your topic. Conduct the experiment and show photos or a video of what happened. Write about what you discovered from doing this experiment.

For example, because my passion project is on 'Oceans', I might chose to do an experiment on how oil spills and pollution impacts marine life.

I would find an experiment and demonstrate what I learnt from conducting my experiment.

My Experiment

FRIDAY

FUN FRIDAY BINGO GRID

Choose 5 activities in a row to do today. Your line can go vertically, horizontally, diagonally or zig-zag. Have a great day. Highlight the activities you are choosing and share some pictures of the things you do with your teacher and class.

Find a fun place to sit and read a book. Under the bed? Up a tree?	Create an artwork or model using only recycled materials.	Bake some biscuits, mini pizzas or cupcakes cakes	Have an online playdate with a friend using Zoom or Facetime.	**Scavenger Hunt** See if you can find: • a toy with wheels • 4 green things • something fuzzy • something you treasure • something noisy • something starting with T • a sphere • something bendy • something smelly
Create a Spoonville family in your garden 	Make a list of all of the things that you are grateful for. Could you show these on the petals of a flower drawing or the coloured stripes of a rainbow painting?	Dance! Put on your favourite song and dance along. You might be able to follow a dance-along version on YouTube.	Draw a self-portrait. Have your family suggest words to describe you. Write these around your picture.	
Make a certificate for a friend to celebrate one of their special qualities or an achievement	Create your own word search using words on the topic of food or cooking, then ask someone to complete it.	Design your ideal cupcake and draw it. Think about flavour, frosting and decorations.	Create a list of the rooms in your house and monitor how often the lights are used. Can you save electricity in any of them?	Enjoy a walk or a bike ride with your family.
Go on a 'senses walk' and think of all of the things that you can see, hear, smell and feel.	Conduct a food scrap and rubbish audit. Develop a plan to reduce the amount of rubbish going in the bin at your house.	Make a timeline to show the main events in your life and highlight when you achieved new things for the first time e.g. your first steps	Play a card or board game or do a jigsaw puzzle with your family.	Design and make a poster of all the ways we can look after the earth.
Make a scrapbook or a collage to show things that make you smile or things that you are proud of.	Make a cubby in your wardrobe, under your bed or in the backyard	Find an object for each letter of the alphabet in your kitchen.	Ride your bike, scooter, roller skates (anything with wheels) for 30 minutes. Remember to wear your helmet.	Make a pop-up card for someone that you miss. 

FUN FRIDAY BINGO GRID

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