



# Home Learning Grid

## Year 6

Week Commencing – 20.04.20

Work to be completed in home learning books

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>Spelling/ Fast Maths</b>	<b>Fast Maths</b> Go to <a href="https://kahoot.it">kahoot.it</a> and use code 03854237	<b>Spelling</b> Go to <a href="https://kahoot.it">kahoot.it</a> and use code 08336060	<b>Fast Maths</b> Go to <a href="https://kahoot.it">kahoot.it</a> and use code 01448404	<b>Spelling</b> Go to <a href="https://kahoot.it">kahoot.it</a> and use code 09587495	<b>Fast Maths</b> Go to <a href="https://kahoot.it">kahoot.it</a> and use code 06664309
<b>Reading</b>	<b>First News</b> See the First News article below and have a go at the questions.	<b>Crater Lake</b> Read pages 57-62 and answer the quick questions at <a href="https://kahoot.it">kahoot.it</a> and using code 02580401	<b>Crater Lake</b> Read pages 62-69 and complete the inference task below.	<b>Crater Lake</b> Enjoy reading chapter 6 of Crater Lake. If you must do some work, send me what you think of it so far.	<b>First News</b> See the First News article below and have a go at the crossword.
<b>Writing</b>	<b>Crater Lake Bug-eyes Incident (Short story)</b> Use the example below (taken from the governments own exemplification document for Year 6 children) to write your own short story of your very own run-in with some bug-eyes at Crater Lake. Imagine that you have just seen one for the first time. What was it like?				<b>100 Word Challenge</b> See below (or on Seesaw activities) for the 100 Word Challenge for this week.
<b>Maths</b>	<b>Angles</b> Complete the 'Vertically Opposite Angles' task below. Click <a href="#">here</a> for video tutorials and answers (no cheating).	<b>Angles</b> Complete the 'Angles in a Triangle' task below. Click <a href="#">here</a> for video tutorials and answers (no cheating).	<b>Angles</b> Complete the 'Angles in a Triangle – Special Cases' task below. Click <a href="#">here</a> for video tutorials and answers (no cheating).	<b>Angles</b> Complete the 'Angles in a Triangle – Missing Angles' task below. Click <a href="#">here</a> for video tutorials and answers (no cheating).	<b>Challenge</b> Can you set a new high score on Timetable Rockstars <a href="#">here</a> or Mangahigh <a href="#">here</a> ?
<b>Challenge</b>	<b>Writing</b> Take a look <a href="#">here</a> for some ace sentence stacking lessons for you to do some creative writing.	<b>Art</b> Join in Rob Biddulph's live art workshop and competition at 10AM <a href="#">here</a> .	<b>Competition!</b> Take a look at the final page of this document for an exciting competition related to the Red Arrows	<b>Art</b> Take a look towards the end of this pack for a limited-resources challenge.	<b>Blog/Vlog</b> Let the world know what you've been up to so far. Create a blog post using video or text for us to upload.

These stories are from pages 7 and 8 of *First News*. Read the stories, and then try the puzzle. To help you, we have underlined the answers to the crossword puzzle clues in the stories – but you will need to match the correct word with each clue!

**DISCOVERY NEWS**



**ANCIENT FOREST FOUND**

**EVIDENCE that a prehistoric forest existed in the South Pole more than 90 million years ago has been discovered by a team of researchers.**

Soil that came from a Cretaceous-era forest was discovered in the seabed near the South Pole and included roots, pollen and plant spores in pristine condition. The fossil traces, found by a team from the UK and Germany, suggest that the South Pole may have had a much warmer climate in prehistoric times than it does now and that the area was once a thick, swampy forest.

The next part of the puzzle is for scientists to work out what caused the area to cool so drastically, forming the ice sheets that are found in Antarctica today. The full report was published in the science journal *Nature*.

**ANCIENT SKULL FOUND**

**AN ancient skull, thought to be the oldest ever found, has been unearthed in South Africa.**

The skull, belonging to modern human's direct ancestor Homo erectus is believed to have been from a young child who lived more than 2.2 million



years ago. The team of Australian researchers who pieced together the 150 skull fragments say this could mean that our ancestors lived 200,000 years earlier than we previously thought. Lead researcher Professor Andy Herries said he "could not stress how rare" the find was. "The group that this two or three-year-old was a part of could have been the origin of everyone alive today."

**ACROSS**

- 2) People you are descended from (plural noun 9)
- 4) The translation of this Latin phrase is 'upright man' (proper noun 4, 7)
- 5) Original condition; unspoilt (adjective 8)
- 7) A period of time between 66 and 145 million years ago (adjective 10)
- 8) Beginning; source (noun 6)

**DOWN**

- 1) Describing the period of time before written, human records (adjective 11)
- 3) Bones or cartilage that protect the brain (noun 5)
- 6) Microscopic grains from the male part of a flower (noun 6)

## Reading (Wednesday)

Now Lance seems to be taking action (and the rest of the gang) and has some kind of plan, take this opportunity to draw your own map of the Crater Lake activity centre. Use all the information you have read so far (even if you have read more of the book like me) to draw your own map with labels for different areas. Why not be creative and add footprints to show the paths of different characters over time?

This story is from page 9 of *First News*. Read the story, and then try the puzzle. To help you, we have underlined the answers to the crossword puzzle clues in the story itself – but you will need to match the correct word with each clue!

## SCIENCE NEWS



### SCIENTISTS in America have developed artificial intelligence (AI) that can translate brain activity into words.

Four volunteers at the University of California had electrode arrays implanted in their brains. These devices measure what goes on inside the brain.

The participants had to read 50 sentences aloud several times, while scientists monitored their brain activity.

The data was inserted into an AI system that turned it into a list of numbers. This was then fed into another part of the AI system that decoded those numbers into words.

The results were impressive, but not perfect. One sentence

read aloud was “Those musicians harmonise marvelously,” but the AI translated it as “The splnach was a famous singer!” Overall, though, scientists were very happy with the AI’s accuracy; for one participant, only 3% of translated sentences needed correcting.

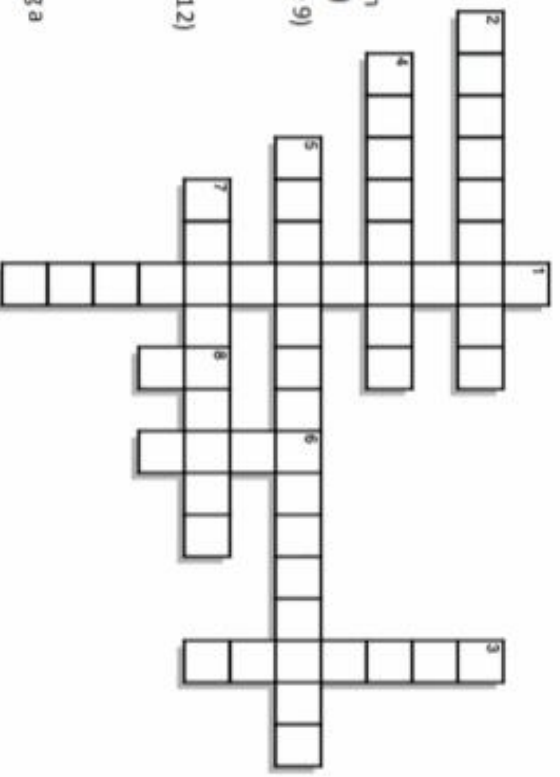
The AI was only working with 50 set sentences, though. It can’t quite translate random sentences yet. And without implanted electrode arrays, there’s no risk of your mind being read any time soon!

#### ACROSS

- 2) To change words in to a different language (present participle 9)
- 4) Placed or fitted something into place (past participle 8)
- 5) Devices that stimulate nerve fibres in the brain to send or obtain neural signals (plural noun 9, 6)
- 7) Inserted or fixed into the body (past participle 9)

#### DOWN

- 1) People taking part in something (plural noun 12)
- 3) Scan hip (anagram) (noun 7)
- 6) Statistics collected for analysis (noun 4)
- 8) The theory and development of computer systems able to perform tasks normally requiring a human mind (noun 2)



## Writing (Monday-Thursday)

### Model texts

#### Opening the Fridge

Slowly, Ewan peeped through the crack in his door. All was black. He took a step out. He could hear distant snoring as he ~~crept~~ <sup>crept</sup> across the landing. As his heart raced he stared into the darkness; he could hear the fridge urging him on-willing him to move. Now the stairs. The tricky bit. Suddenly a THUD!... He raced down the creaking stairs—even the seventh one that makes an earsplitting creak noise. He could see the white rectangle straight ahead of him. Then he opened it. He took a quick glance and saw the chocolate digestives. ~~Then~~ He could feel pair of eyes watching her in the darkness. Who was it? Had he been seen...? His eyes darted around the room, his heart in his mouth. He grabbed the biscuits and ran for it.

"Ewan!" echoed a voice.

#### Sneaking Downstairs

I lay under the covers, staring at the ceiling, my stomach empty. Slowly I got out of bed and crept towards my door. The handle shimmered in the darkness, urging me to turn it. My hand quivered as the brass handle turned and made a 'click'. I jumped. Shadows crept across the landing while I nibbled at my nail. My parents' room's door creaked and I bolted down the stairs—including the seventh one that makes an earsplitting thud when you step on it. I stared at the human-eating fridge and my legs turned to jelly as I tiptoed towards it.

I reached out and...

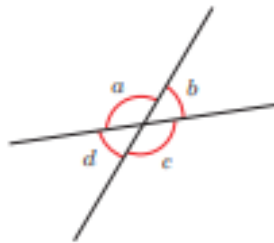
## Writing (Friday)

Welcome to our third 100 Word Challenge - a writing competition. You can write whatever you want, inspired by the picture below. You must write no more than 100 words so treat every word like it is gold. Upload whatever writing you do, either a photo or submitted as a Seesaw note, and a winner will be chosen at the end of the school day on Friday. You could write a description, a story, a newspaper article (or part of) or anything you would like at all. Have fun.



## Vertically opposite angles

- 1 The diagram shows four angles formed by two straight lines.



- a) Estimate the sizes of the angles.

$a =$    $b =$    $c =$    $d =$

- b) What is the total of angles  $a$  and  $b$ ?

Explain why.

\_\_\_\_\_

Do any other pairs of angles have this same total?

- c) Angles  $a$  and  $c$  are vertically opposite angles.

What do you notice about the sizes of angles  $a$  and  $c$ ?

\_\_\_\_\_

- d) Angles  $b$  and  $d$  are also vertically opposite angles.

What do you notice about the sizes of angles  $b$  and  $d$ ?

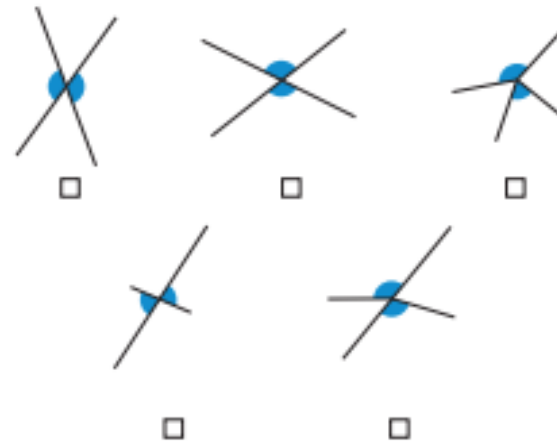
\_\_\_\_\_

- e) Complete the sentence.

Vertically opposite angles \_\_\_\_\_



- 2 Tick the pairs of angles that are vertically opposite.



Compare answers with a partner.



- 3 Work out the sizes of the unknown angles.

Give reasons for your answers.

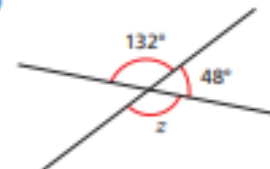
- a)



$y =$   because \_\_\_\_\_

\_\_\_\_\_

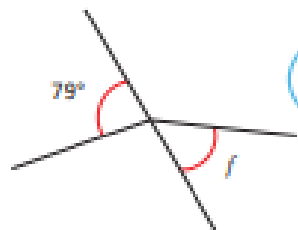
- b)



$z =$   because \_\_\_\_\_

\_\_\_\_\_

- 4 Annie is working out the size of angle  $f$ .



Angle  $f$  is equal to  $79^\circ$  because vertically opposite angles are equal.



Do you agree with Annie? \_\_\_\_\_

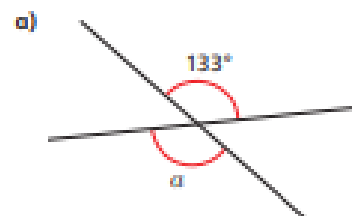
Explain your answer.

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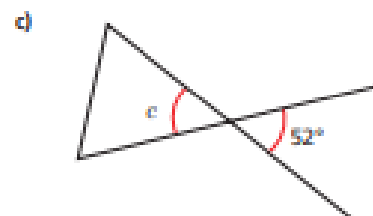


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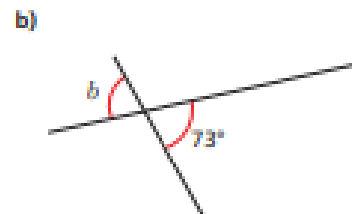
- 5 Work out the unknown angles.



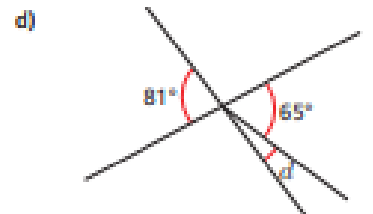
$a = \square$



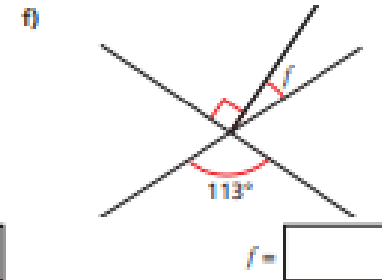
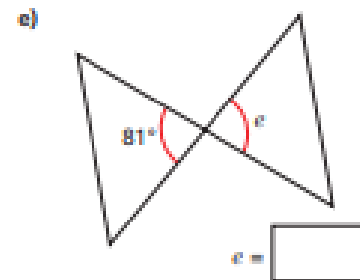
$c = \square$



$b = \square$

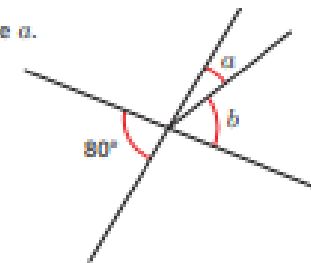


$d = \square$



Talk about your reasons with a partner.

- 6 Angle  $b$  is three times the size of angle  $a$ .



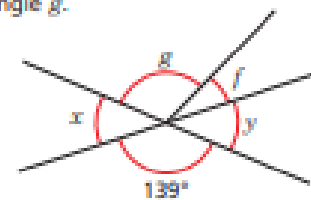
Work out the sizes of angles  $a$  and  $b$ .

$a = \square$

$b = \square$

- 7 Angle  $f$  is one quarter of the size of angle  $g$ .

Angle  $f$  is  $28^\circ$ .



Are angles  $x$  and  $y$  vertically opposite? \_\_\_\_\_

Explain your answer.

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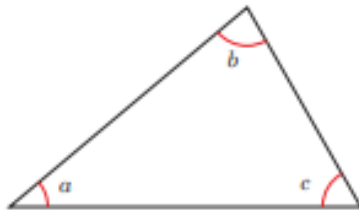


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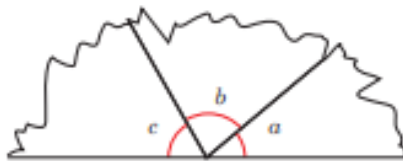


## Angles in a triangle

1 Here is a triangle.



a) The three vertices are torn off the triangle and arranged on a straight line.



What is the sum of the three angles?

How do you know?  
\_\_\_\_\_

b) Now estimate the sizes of angles  $a$ ,  $b$  and  $c$  in the triangle.

$a =$

$b =$

$c =$

c) What is the total of angles  $a$ ,  $b$  and  $c$ ?

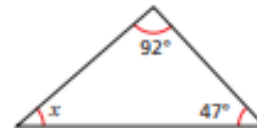
d) Complete the sentence.

Angles in a triangle \_\_\_\_\_

2 Work out the sizes of the unknown angles.

Give reasons for your answers.

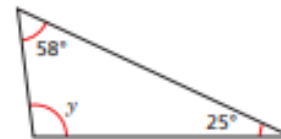
a)



$x =$   because \_\_\_\_\_

\_\_\_\_\_

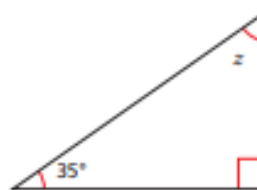
b)



$y =$   because \_\_\_\_\_

\_\_\_\_\_

c)



$z =$   because \_\_\_\_\_

\_\_\_\_\_

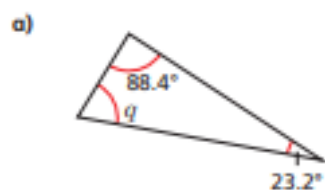
d)



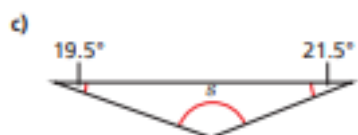
$w =$   because \_\_\_\_\_

\_\_\_\_\_

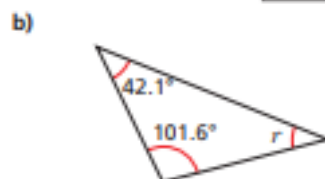
3 Work out the unknown angles.



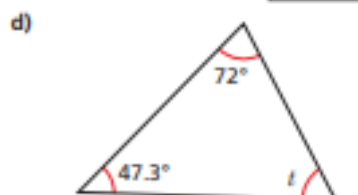
$q = \square$



$s = \square$



$r = \square$



$t = \square$

Discuss your reasons with a partner.

4 a) Two angles in a triangle are  $42^\circ$  and  $57^\circ$ .

What is the size of the third angle?

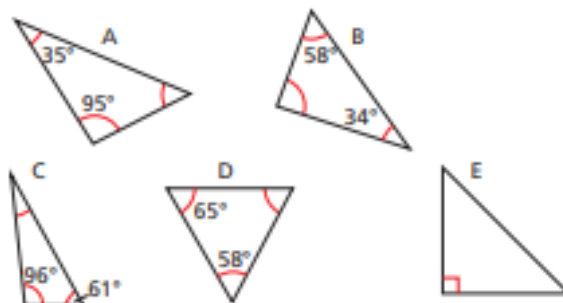
b) Two of the angles in a triangle are  $12^\circ$ .

What is the size of the third angle?

c) One of the angles in a triangle is  $38^\circ$ . Another angle is twice the size of the first angle.

What is the size of the third angle?

5 Sort the triangles into the table.



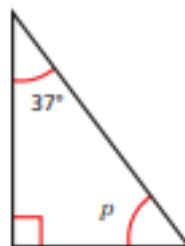
0 acute angles	1 acute angle	2 acute angles	3 acute angles

Are any of the columns empty? Why?

\_\_\_\_\_

\_\_\_\_\_

6



$p = 143^\circ$  because angles in a triangle sum to  $180^\circ$  and  $180 - 37 = 143$



Do you agree with Ron? \_\_\_\_\_

Explain your answer.

\_\_\_\_\_

\_\_\_\_\_

Angles in a triangle – special cases

1 Here is a triangle.



a) What type of triangle is it?

\_\_\_\_\_

How do you know?

\_\_\_\_\_

\_\_\_\_\_

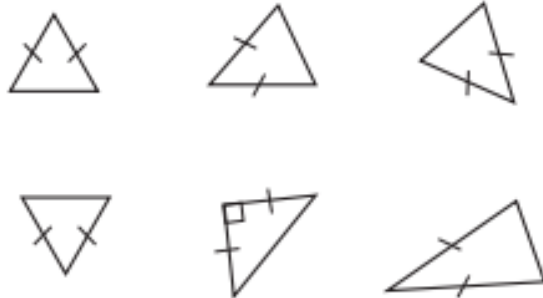
b) Work out the size of angle  $m$ .

c) What do you notice?

d) Complete the sentence to describe the angles in an isosceles triangle.

In an isosceles triangle \_\_\_\_\_

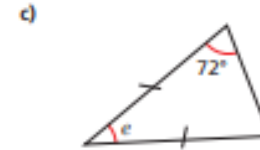
2 Identify and label the angles that will be equal in each triangle.



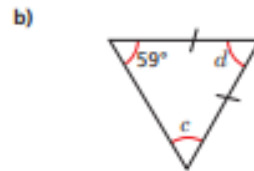
3 Work out the sizes of the unknown angles.



$a =$    $b =$



$e =$



$c =$    $d =$



$f =$

Talk about your reasons with a partner.

4 Dexter is working out the unknown angles in triangles.



I can't work out either of the missing angles because I don't have enough information.



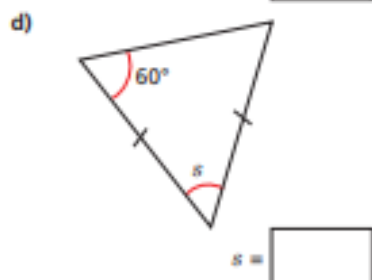
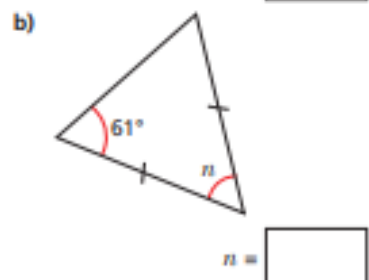
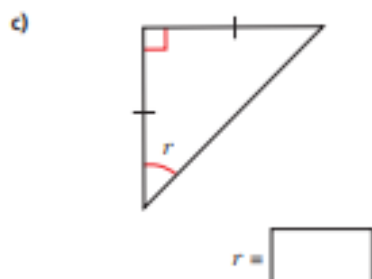
Do you agree with Dexter? \_\_\_\_\_

Explain your answer.

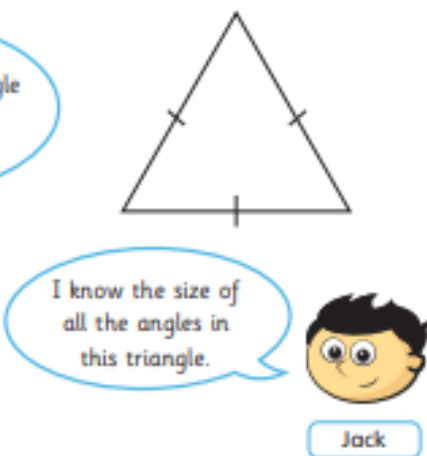
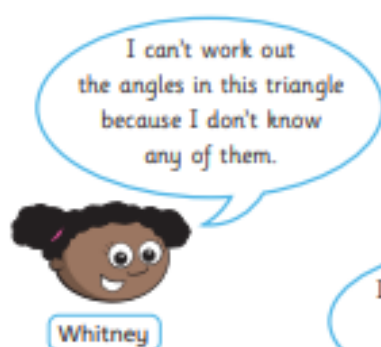
\_\_\_\_\_

\_\_\_\_\_

5 Work out the sizes of the unknown angles.



6 Whitney and Jack are working out the angles in this triangle.



Who do you agree with? \_\_\_\_\_

Talk about it with a partner.

7 Are the statements true or false?

- a) Every isosceles triangle is equilateral. \_\_\_\_\_
- b) Every equilateral triangle is isosceles. \_\_\_\_\_
- c) A right-angled triangle can be equilateral. \_\_\_\_\_
- d) A right-angled triangle can be isosceles. \_\_\_\_\_

Explain your answers to a partner.

8 Two angles in a triangle are  $43^\circ$  and  $74^\circ$ .

Is the triangle isosceles? \_\_\_\_\_

Show your workings.

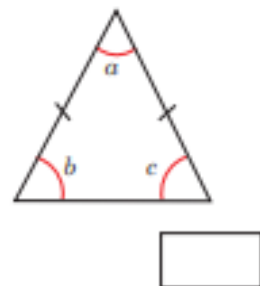
9 One angle in an isosceles triangle is  $29^\circ$ .

What could the other angles be? Give two possible answers.

\_\_\_\_\_

10 Angle  $b$  is twice the size of angle  $a$ .

Work out the size of angle  $c$ .



## Angles in a triangle – missing angles

1 Match each diagram to the correct rule.



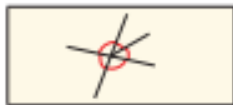
Angles on a straight line sum to  $180^\circ$



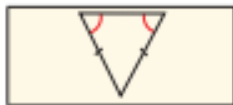
Angles around a point sum to  $360^\circ$



Angles in a triangle sum to  $180^\circ$



In an isosceles triangle, two angles are equal

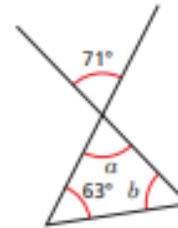


Vertically opposite angles are equal

2 Work out the sizes of the unknown angles.

Give reasons for each stage of your working.

a)



$a =$   because \_\_\_\_\_

$b =$   because \_\_\_\_\_

b)

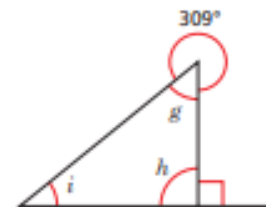


$d =$   because \_\_\_\_\_

$e =$   because \_\_\_\_\_

$f =$   because \_\_\_\_\_

c)

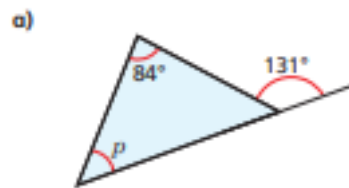


$g =$   because \_\_\_\_\_

$h =$   because \_\_\_\_\_

$i =$   because \_\_\_\_\_

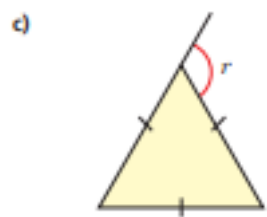
3 Work out the sizes of the angles marked with letters.



$p = \square$



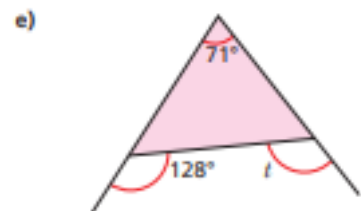
$q = \square$



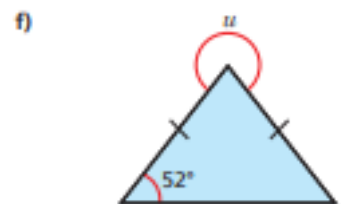
$r = \square$



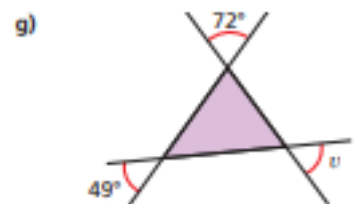
$s = \square$



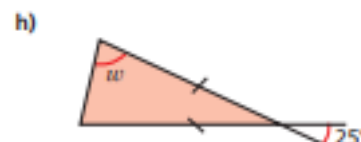
$t = \square$



$u = \square$



$v = \square$

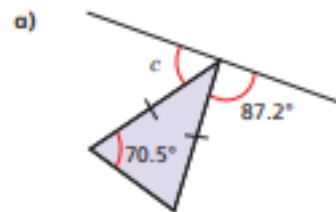


$w = \square$

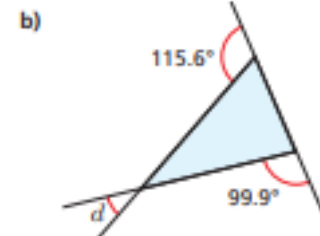
Talk about your reasons with a partner.



4 Work out the sizes of the unknown angles.

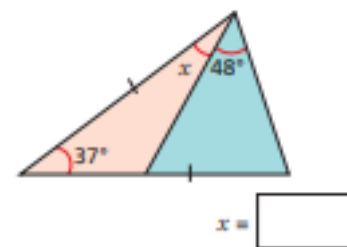


$c = \square$

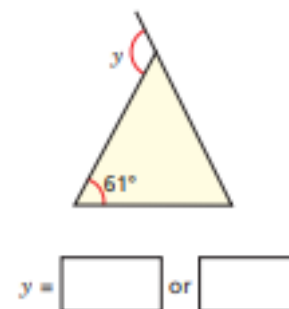


$d = \square$

5 Work out the size of angle  $x$ .



6 Here is an isosceles triangle. Find two possible sizes of angle  $y$ .



## Other Fun Stuff

Why not have a go at some art work based around the limited resources you have around the home? Take a look at these examples and show us what you come up with.



## Competition

You may have seen this competition announced on Look North on 15.04.20. It is being hosted by a charity called Aerobility and involves you creating your own aircraft at home, sending in photos or video footage when you are finished. The prize is an actual flight in a Red Arrow Hawk – something money can't buy. Click the image below to find out more.

