

# Year 4

## Home Learning Pack 11

For Week Commencing 22/06/2020



This is Year 4's **Eleventh** Home Learning Pack. This pack includes information, support and questions for the five English and math tasks that children will be provided through the week.

Where possible, we would like that home learning include:

- ★ Daily reading through the MyON reading site: <https://www.myon.co.uk/login/index.html>
- ★ Daily times tables practise at home or online.
- ★ Completion of the daily English and the daily math task.
- ★ Completion of an additional learning activity (Miss Bailey will recommend activities related to a range of subjects through Class Dojo).

However, we do appreciate that this is a challenging time for families. As such, five tasks have been identified as those we would most recommend focusing on throughout the week.

Look out for this symbol (★) in this booklet and the weekly overview.

### A message from Miss Bailey:

This week, I would really like to push the use of MyON in line with it being such a success in Years 5 and 6 and a possible route to homework in the future. I will be sending out a video on Monday that goes through how we can use all the features of this site – watch it and give it a go!

As a reminder, please keep up to date with all news regarding our school reopening on our school website. <http://www.westcornforth.durham.sch.uk/category/news/>

# LIST OF KEY WEBSITES:

## ENGLISH

**MyON:** <https://www.myon.co.uk/login/>

**Lexia Online:** <https://www.lexiacore5.com/register>

Reading books: <https://www.oxfordowl.co.uk/>

Trapped: <https://www.topmarks.co.uk/Flash.aspx?e=spelling-grammar01>

Parts of Speech: [https://www.sheppardsoftware.com/grammar/grammar\\_tutorial.htm](https://www.sheppardsoftware.com/grammar/grammar_tutorial.htm)

Finish the Story: <http://www.scootle.edu.au/ec/viewing/L1275/index.html#>

Spooky Spellings: <http://www.ictgames.com/mobilePage/spookySpellings/index.html>

Julia Donaldson's Weekly Broadcast: <https://www.facebook.com/OfficialGruffalo/>

Audible Audiobooks: <https://stories.audible.com/start-listen>

Harry Potter Activities from JK Rowling: <https://www.wizardingworld.com/news/introducing-hp-at-home>

JK Rowling's new book, the Ickabog: <https://www.theickabog.com/read-the-story/>

- Don't forget to send in any of the illustrations you do to JK Rowling's competition and to our school so we can share them on our Twitter page.

## MATHS

**TTRockstars:** <https://ttrackstars.com/>

Marlon's Magical Maths Mission: <https://mathsframe.co.uk/en/resources/resource/383/Marlons-Magical-Maths-Mission-Multiplication>

Maths Fishing: <https://mathsframe.co.uk/en/resources/resource/306/Maths-Fishing-Multiplication>

Maths Archery: <https://mathsframe.co.uk/en/resources/resource/399/Archery-Arithmetic-Multiplication>

Hit the Button: <https://www.topmarks.co.uk/maths-games/hit-the-button>

Daily 10: <https://www.topmarks.co.uk/maths-games/daily10>

Time Games: <https://www.teachingtime.co.uk/>

Jacob's Maths Car Game: <https://mathsframe.co.uk/en/resources/resource/548/Maths-Road-Turn>

The Maths Factor by Carol Vorderman: <https://www.themathsfactor.com/?r=2064492557>



## ENGLISH 1 – RESEARCHING CORAL REEFS

### Today's Task:

Read through both of the books highlighted on MyON Projects, titled: Exploring Coral Reefs: A Benjamin Blog and His Inquisitive Dog and Coral Reefs: Colourful Underwater Habitats. When you are reading them, make notes on key information which could help you with writing about coral reefs this week. You could write your notes as journal comments, an online document such as Microsoft Word or a piece of paper.

### Think about:

- What is a coral reef?
- Where do you find coral reefs?
- What creatures live in coral reefs?
- What is the coral reef habitat like (eg. Is it warm?)?
- What makes a coral reef special?
- Any other interesting information you learn.

**Note:** If you cannot get access to MyON Projects due to device or internet access, alternative texts can be found at the end of the English portion of this Home Learning Pack.

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## ENGLISH 2 – DESCRIBING CORAL REEFS

Use the images below, and any more you liked in yesterday's book or that you find online, to explore the appearance of coral reefs.



### Today's Task:

Imagine you are a clownfish living in a sea anemone within one of these beautiful habitats. Can you describe your home to a human who may never have seen it before in the **1<sup>st</sup> person** and the **present tense**?

### Think About:

- What would the big picture would look like? What would the zoomed in picture look like?
- What shapes are around him? If he looked up/down what would he see?
- If coral reefs were a city, what would they be like?
- What other creatures might he spot and describe the appearance of?
- Are any dangerous?

**Challenge:** Can you use the **descriptive language** we have been using across lockdown in your description? Eg. Fronted adverbials, embedded clauses, similes and the senses.

**Note:** If you cannot get access to MyON Projects due to device or internet access, complete your work on paper and send in a photo.



## ENGLISH 3 – IDENTIFYING PROBLEMS AND SOLUTIONS

Coral reefs are the backbone of the entire ocean with a quarter of all marine life spending at least part of its lifecycle in these wonderful beauty spots. Sadly, coral reefs are also a habitats which are under threat.

**Overfishing**, **pollution** and **climate change** are destroying the corals and the ecosystem that lives there. In fact, a 2020 report found that 50% of the world's coral reefs have already been destroyed, and another 40% could be lost over the next 30 years.

### Today's Task:

Delve into why these three problems are having devastating consequences to our marine life by conducting some of your own research and then come up with three or more ways we could help save our coral reefs.

### Think about:

- What do we mean by **overfishing**, **pollution** and **climate change**?
- Why do they cause destruction?
- Who is to blame for the problem?
- How could we stop the problem:
  - Is there a safer way to do something?
  - Could we change our behaviour?
  - Could we ban something?

**Note:** If you cannot get access to MyON Projects due to device or internet access, complete your work on paper as a spider diagram by using the texts found at the end of the English portion of this Home Learning Pack.

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## ENGLISH 4 – WRITING A DIARY ENTRY

### Today's Task:

Choose your favourite coral dwelling creature and jump into their mind so you can write from their POV. Can you create a diary entry describing what their day is like in a coral reef which is being destroyed by overfishing, pollution, climate change or all three? You will need to write in the **1<sup>st</sup> person** and in the **past tense**.

### Think About:

- How might the day of your creature begin?
- What might their habitat look like if it has been damaged by humans?
- What might your creature go and do?
- Will anything or anyone be missing?
- What scary thing related to **overfishing**, **pollution** or **climate change** might happen to your creature?
- How does your creature feel about what has happened to them today?
- What does your creature hope will happen in the future?

**Challenge:** Can you use emotive, powerful words which make the reader feel like how your poor sea creature is feeling?

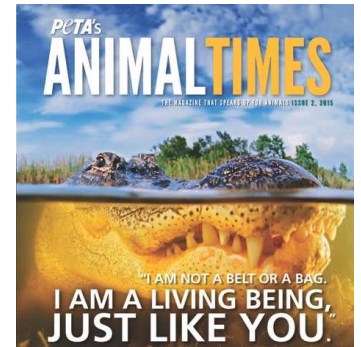
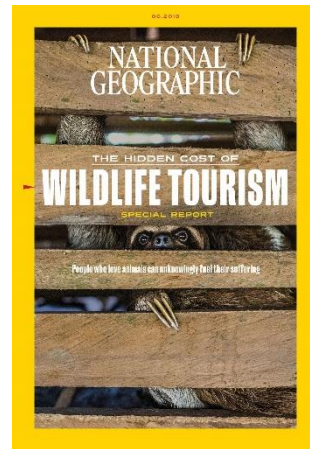
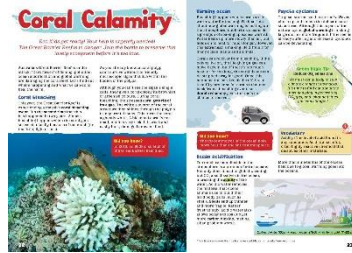
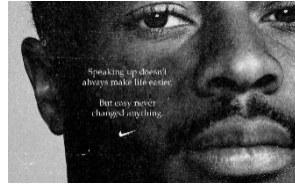
**Note:** If you cannot get access to MyON Projects due to device or internet access, complete your work on paper and send in a photo.



# ENGLISH 5 – WRITING A PERSUASIVE ADVERT

## Advertisements

We often think of advertisements as tools that companies use to persuade us to buy something, whether it is a toy, a holiday or a car. However, advertisements can also be used to promote important messages in magazines, eg:



## Persuasive Language

Persuasive language is language that makes us more likely to be convinced to agree with someone's point or do what a person asks us to do. This type of language is all to do with exaggeration – going completely over the top – so that something is very obvious. There are lots of different types of persuasive language that we have used in Year 4, and you might be pretty used to using some of them at home anyway. Let's go through them:

- **Rhetorical Questions** – Rhetorical questions are questions that the writer asks the reader without wanting an answer. The point is to make the reader think. *Eg. How would you like it if someone hurt you like this?*
- **Superlatives** – Superlatives are words that say something is the most of something. *Eg. deadliest, most beautiful, largest.*
- **Powerful, Emotive Words** – Emotive words are words that make you feel something because they are very strong. For example, saying that something is glorious rather than good, peaceful rather than quiet or horrifying rather than ugly. *Eg. horrific, heart-breaking, destroyed.*
- **Alliteration** – Alliteration is where a series of words begin with the same letter or sound each time so they sound really interesting. *Eg. Horrible, horrific humans.*
- **Power of Three** – Power of three is where three words or three phrases are listed together to make them stand out. *Eg. Humans are selfish, cruel and evil.*
- **Repetition** – Repetition is where words or phrases are used again and again and again so that they stick in the reader's mind. *Eg. Stop pollution in our reefs! – at the end of each paragraph.*

## Today's Task:

Now that you have learnt all about the beauty of coral reefs, and the heart-breaking reality that they are being destroyed, write a persuasive advert, which could be put in a magazine, convincing humans to protect these underwater habitats. Your advert should introduce the problem, explain why it is a problem and offer ways that people can help all while using **persuasive language** to make the point stick. You will need to write in the **2<sup>nd</sup>** and **3<sup>rd</sup>** **person** and in the **present tense** and could use your work from Wednesday to help you.

**Challenge:** Can you use three different types of persuasive language in your text?

**Note:** If you cannot get access to MyON Projects due to device or internet access, complete your work on paper and send in a photo.

# ENGLISH RESOURCES FOR THOSE WITHOUT DEVICE/INTERNET ACCESS:

## Coral Reef (ENG 1)



The coral reef is one of the major marine biomes. Although it is a relatively small biome, around 25% of the known marine species live in coral reefs.

At first glance, you may think that coral reefs are made up of rocks, but they are actually live organisms. These organisms are tiny little animals called polyps. Polyps live on the outside of the reef. As polyps die, they become hard and new polyps grow on top of them causing the reef to grow.

Since polyps need to eat to stay alive, you can think of the coral reef as eating, too. They eat small animals called plankton as well as algae. The algae get their food from the sun. This is why coral reefs form close to the surface of the water and in clear water where the sun can feed the algae.

Coral reefs need warm (around 25°C), shallow water to form. They form close to the equator near coastlines and around islands throughout the world. A significant portion of the world's coral reefs are located in Southeast Asia and near Australia. The largest coral reef is the Great Barrier Reef located off of Queensland, Australia. The Great Barrier Reef stretches for 2,600 miles.



All sorts of animals live around a coral reef. This includes many different types of corals such as star coral, brain coral, column coral, cactus coral, and finger coral. Some of the most strange and interesting creatures in the world live here. Many animals attach themselves to the reef covering nearly every square inch. They include sponges, starfish, anemones, cucumbers, snails, and clams. Also, there are lots of [fish](#) swimming around such as cuttlefish, sharks, [lionfish](#), pufferfish, [clownfish](#), blue tangs and eels. There are 1500 species of fish and 400 species of coral that live on the Great Barrier Reef alone.

Besides being beautiful, a tourist attraction, and an important part of planet Earth, coral reefs have a positive impact on many people throughout the world. This includes food from fishing, protection of coastlines from [erosion](#), and even medical discoveries such as medicines for cancer. In addition, they remove and recycle carbon dioxide from the air which can contribute to global warming.

In summary, coral reefs are beautiful structures of living plants and animals located throughout the seas of the world.

Fun Facts:

- Coral reefs grow very slowly. Large reefs grow at the rate of 1 to 2 cm per year. It's estimated that some of the largest reefs took as long as 30 million years to form.
- Some animals in the coral reef have symbiotic relationships. This means they help each other to survive. The clown fish and the anemone are one example of this.
- Different types of coral grow into different shapes. Some look like mushrooms, some trees, fans, honeycombs, flowers, and even brains.
- The Great Barrier Reef is so big it can be seen from outer space.
- Some coral reefs have turned white because they lose their algae when the water gets too salty or warm.

# Human Impact on Coral Reefs (ENG 3)

## Pollution

Pollution is when the environment is littered. This might be by something solid (eg. plastic bottle top), liquid (eg. oil) or gas (car fumes). You can also get noise pollution which is when an environment is filled with too much noise. Millions of tons of plastic waste end up in the ocean every year. And the trash stays there: Whether it's grocery bags or water bottles or kids' toys, plastic is practically indestructible. Now marine scientists have discovered that it's killing coral reefs. The plastic could be harming coral in at least two ways. First, it clings to the coral, especially branching coral. And where it clings, it sickens or kills. The plastic could be cutting the coral, allowing bacteria to get in and make it ill. Secondly, the plastic can block sunlight from getting to the coral and algae so the coral can't feed.



## Overfishing

Overfishing is when humans fish too much in one area and there isn't enough fish left over to populate the habitat. Because there isn't enough fish, there aren't any baby fish and eventually the species dies out. Overfishing is particularly bad for coral reefs because losses of different species living in the habitat causes a ripple effect to other living things in that habitat. All lifeforms in these systems are ultimately dependent upon all of the other creatures in these ecosystems, with each one playing an important and unique role. If there are too few individuals of one species, but too many of another, this can potentially bring the entire ecosystem out of balance and lead to multiple negative physical and ecological effects.



*An example of this imbalance has occurred when there has been overfishing of Groupers in the Great Barrier Reef ecosystem. Groupers consume Damselfish, and without enough Groupers to help keep the Damselfish population under control, the Damselfish can become too numerous and create destruction in the reef. Eventually this will kill coral.*

## Climate Change

Climate change is the greatest global threat to coral reef ecosystems. Scientific evidence now clearly indicates that the Earth's atmosphere and ocean are warming, and that these changes are primarily due to greenhouse gases derived from human activities.

As temperatures rise, mass coral [bleaching](#) (where corals wither, die and lose their colour) events and infectious [disease](#) outbreaks are becoming more frequent. The additional carbon-dioxide also makes the water more acidic which is bad for the corals which need lots of calcium. Not just this, climate change will affect coral reef ecosystems, through sea level rise, changes to the frequency and intensity of tropical storms, and altered ocean circulation patterns which can all lead the reef to be battered and hurt.



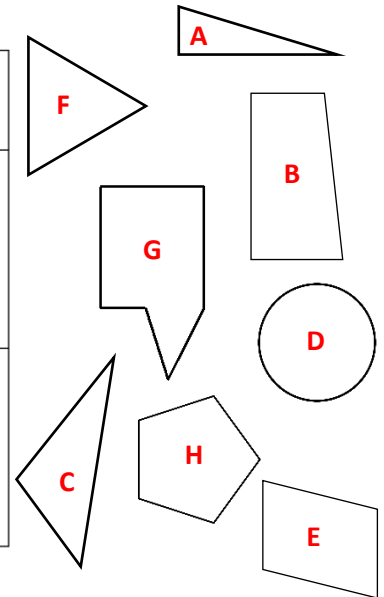
When combined, all of these impacts dramatically alter ecosystem function, as well as the goods and services coral reef ecosystems provide to people around the globe.

# MATHS 1 – BASIC PROPERTIES OF 2D SHAPES

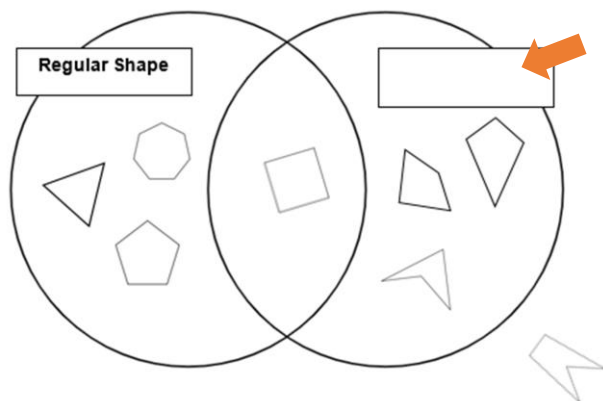
A 2D shape is a shape which only has one surface. This means that it has length and width but no depth – it looks flat and you can't pick it up. The properties of 2D shapes are what separates them from one another. This includes the number of sides and vertices and whether it is regular or not. See the support video linked on Class Dojo to recap this.

Complete the Carroll diagram by classifying the 2D shapes in the right box based on their properties:

	Has at least one pair of parallel sides	Has no parallel sides
Is a triangle		
Is not a triangle		



Look at this Venn diagram. What could the missing label be?

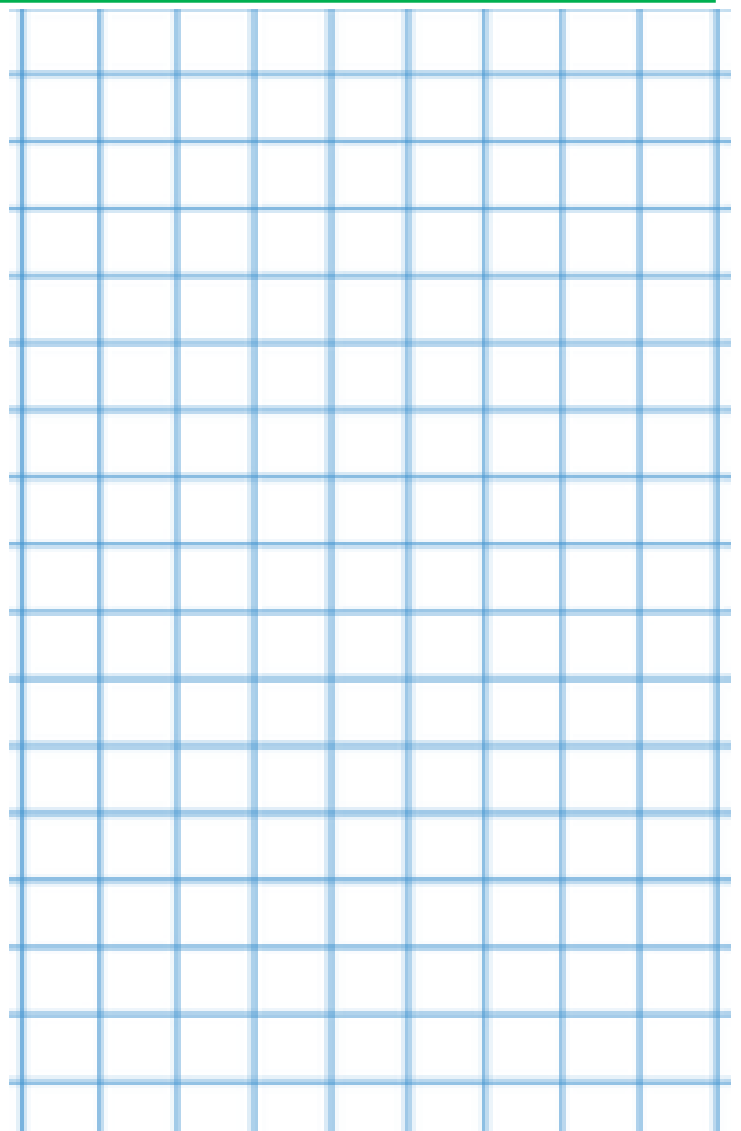


Can you think of one more shape which could go on the left side and one more shape that can go on the right side?

Marty says, "There are no other shapes which could go in the middle." **Explain** why Marty is correct.

**Draw the shape:**

- Irregular hexagon.
- At least one pair of parallel sides.
- At least one side perpendicular to another.
- At least one side measures 5cm.





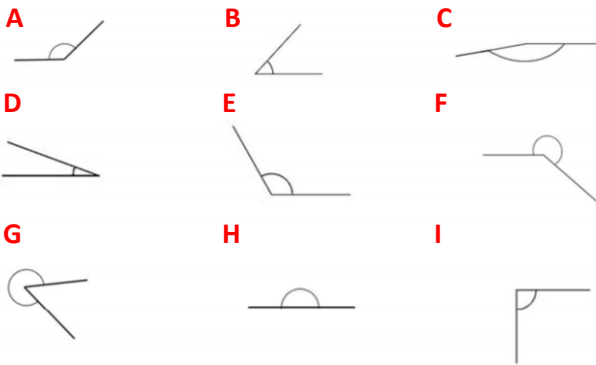
# MATHS 2 – IDENTIFYING & COMPARING DIFFERENT ANGLES

Two key angles are a right angle ( $90^\circ$ ) and a straight line ( $180^\circ$ ). We describe other angles outside of these as acute, obtuse and reflex. Recap these different angles now using the support video linked on Class Dojo.

**Define** the following mathematical words and **draw** an example of each:

- 1) Acute Angle
- 2) Reflex Angle
- 3) Obtuse Angle

1) Using your observation skills, order all of the angles below from **smallest to largest**.

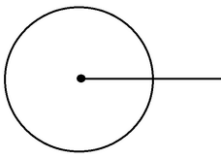


2) Which of the angles are **obtuse**?

and  and

3) If a right angle is  $90^\circ$ , which angle do you estimate is  $30^\circ$ ?

This angle is called a full rotation:



4) Which of the angles above would you need two of to make a full rotation?

5) Can you use this information to work out how many degrees a full rotation is?

Match the angles which will still be acute when they are combined to make a larger angle:

33°

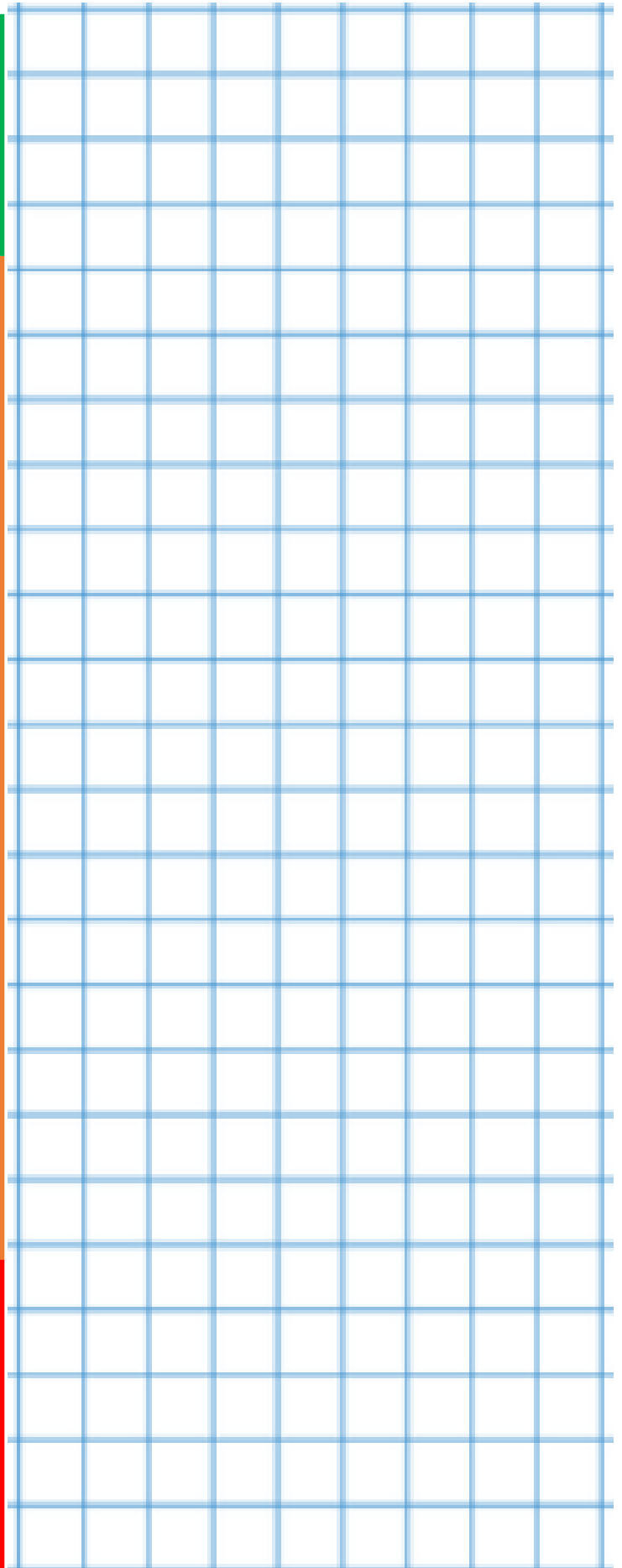
56°

14°

66°

5°

79°



# MATHS 3 – MEASURING & DRAWING DIFFERENT ANGLES

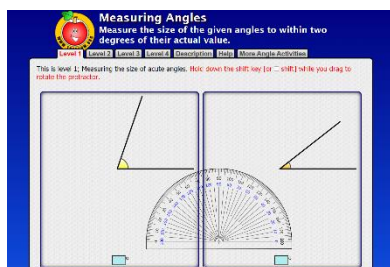
Now that we have recapped the difference between different types of angle, let's remind ourselves of how to use a protractor to measure and create different sized angles too. See the support video linked on Class Dojo to remind yourself about how we can use a protractor to do this.

Read the size of each angle which has already been lined up with the protractor for you:



Lets have a go at measuring angles ourselves.

Go to the Transum website linked below and use the online protractors to measure each of the angles shown.



Complete **Level 1** and **Level 2** and then send a photo of how you got on.

**Link:**

[https://www.transum.org/software/SW/Starter\\_of\\_the\\_day/Students/Measuring\\_Angles.asp?Level=1](https://www.transum.org/software/SW/Starter_of_the_day/Students/Measuring_Angles.asp?Level=1)

**Remember:** *If your angle is pointing toward the right you should use the blue scale, and if your angle is pointing to the left you should use the black scale. You should always start measuring from 0 on the scale.*

Now let's have a go at drawing some angles using this large protractor:

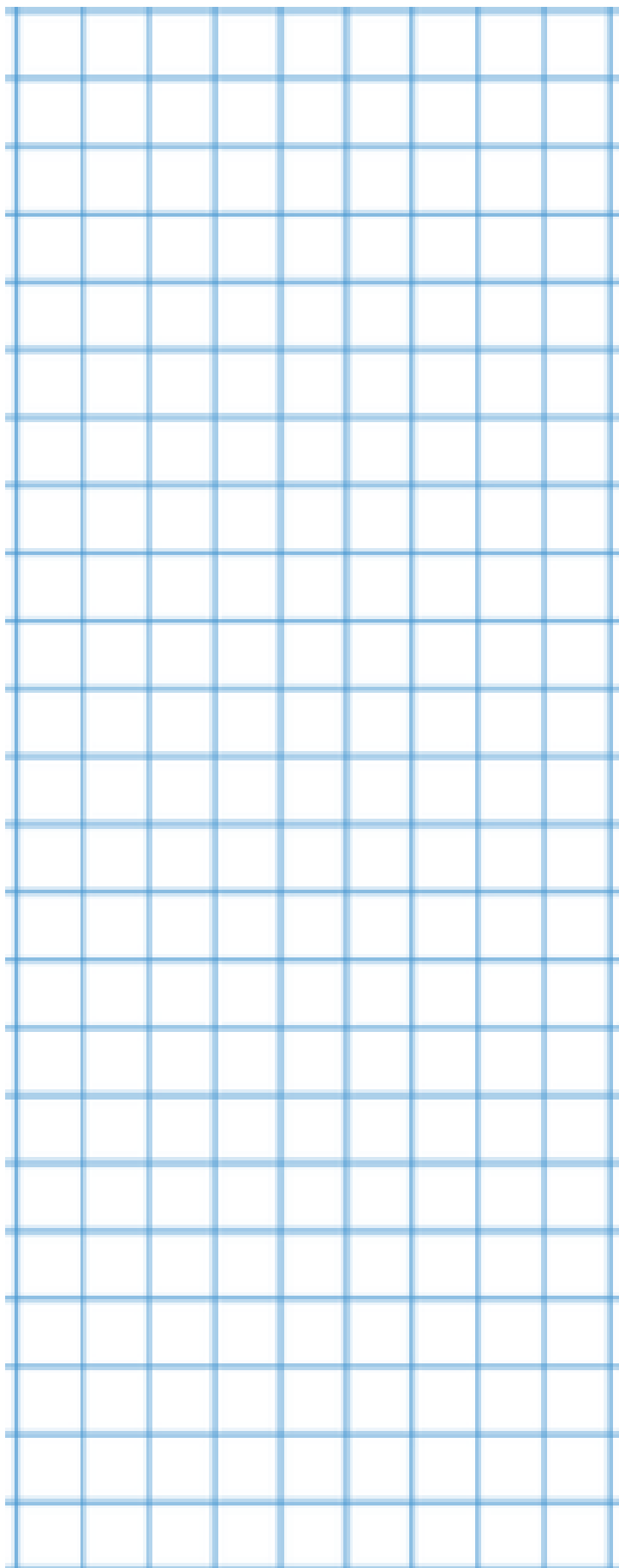
[https://www.ginifab.com/feeds/angle\\_measurement/](https://www.ginifab.com/feeds/angle_measurement/)

Draw straight line and then use the protractor to plot the angle. Connect the plot to the line with a ruler. Now you have your angle!

- 1)  $50^\circ$
- 2)  $20^\circ$
- 3)  $130^\circ$

**Challenge:**

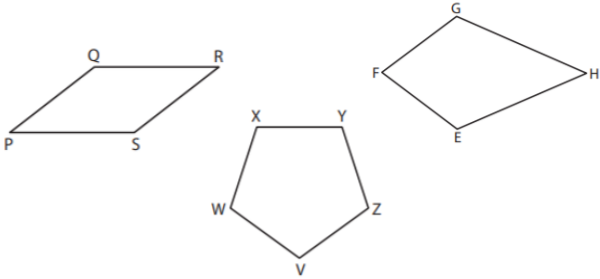
Can you draw a shape which has four right angles? What shape have you drawn?



# ★ MATHS 4 – IDENTIFYING ACUTE ANGLES IN SHAPES

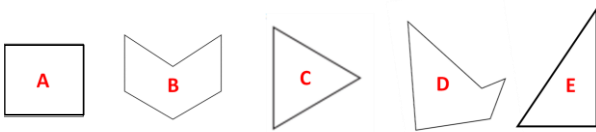
Practise spotting the acute angles that we have been learning about this week in this activity all about identifying them in different shapes. Can you make links between the regularity of shapes and the size of their angles?

Write the all letters which identify **acute** angles in the different shapes below:



Match each statement to the shape that they describe.

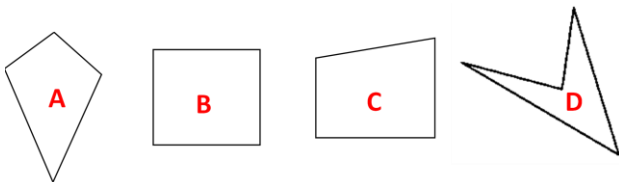
- 1) I am a regular shape and have 3 acute angles.
- 2) I have two acute angles that could add together to make a right angle.
- 3) I have only one angle greater than an acute angle.
- 4) I have no acute angles
- 5) I am an irregular shape and have 3 acute angles.



Draw a table like this:

Property	A	B	C	D
Number of acute angles.				
Number of right angles.				

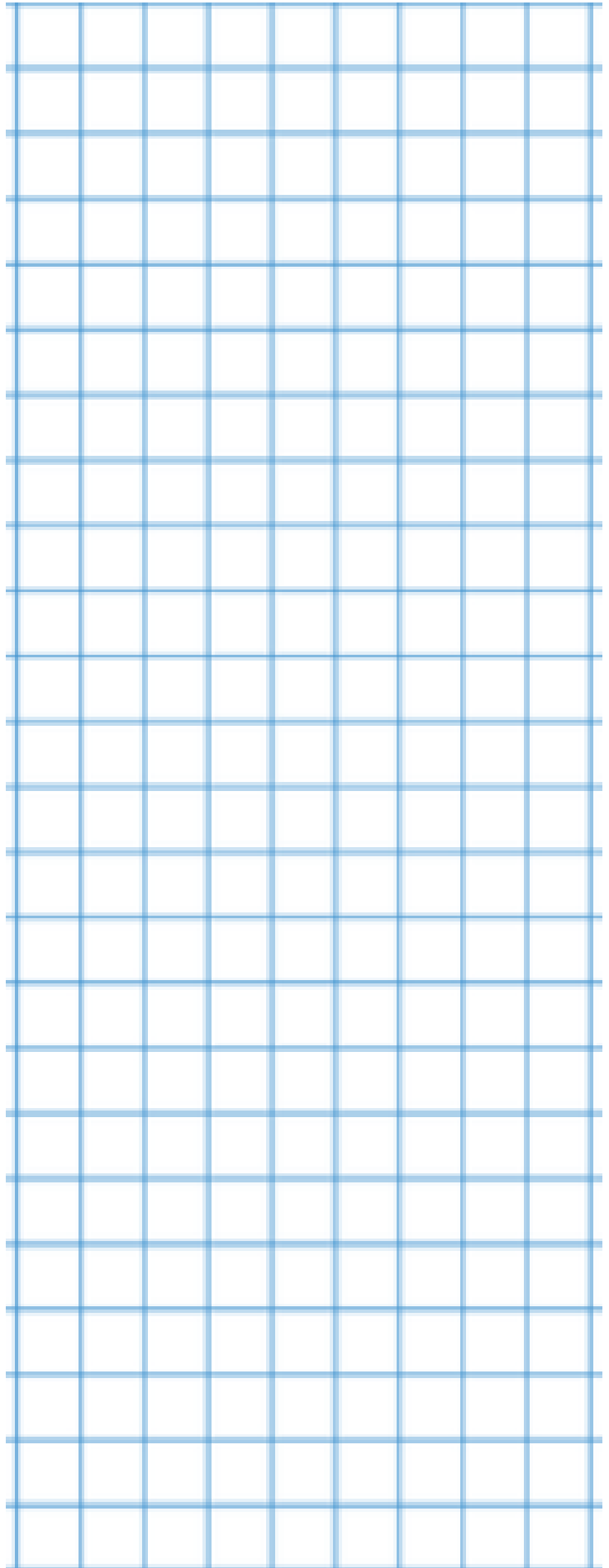
Record the necessary information about these shapes in your table:



What relationship do you notice between shapes with lots of acute angles and shapes with lots of right angles?

**Challenge:**

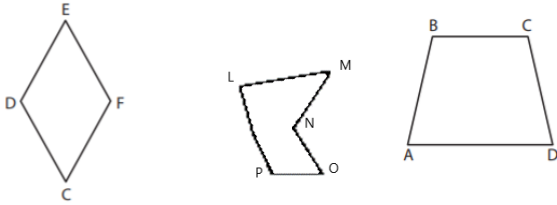
Can you draw a quadrilateral with three right angles and one acute angle?



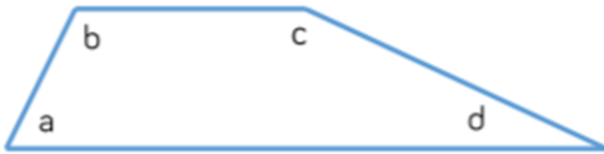
# MATHS 5 – IDENTIFYING OBTUSE & REFLEX ANGLES IN SHAPES

Practise spotting the acute angles that we have been learning about this week in this activity all about identifying them in different shapes. Can you make links between the regularity of shapes and the size of their angles?

Write the all letters which identify **obtuse** angles in the different shapes below:

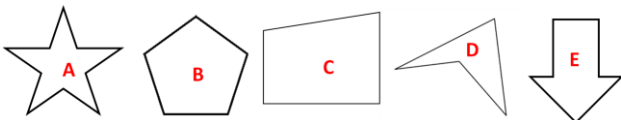


Does the following shape have any **reflex** angles? **Explain** how you know your answer.



Match each statement to the shape that they describe.

- 1) I am an irregular quadrilateral with an obtuse angle.
- 2) I am made up of 5 acute angles and 5 obtuse angles.
- 3) I am a regular shape and all of my angles are obtuse.
- 4) I have 2 right angles, 2 reflex angles, 2 acute angles and an obtuse angle inside my shape.
- 5) I am an irregular quadrilateral with a reflex angle.



It is a beautiful, hot, sunny day and Linda wants to sit outside and relax. When she opens her deck chair, should she set the seat at an obtuse angle or a reflex angle to be comfy?



Ayub says that he can draw a triangle which has a t least one right angle and at least one obtuse angle.

Is he right? **Prove** it by drawing an example yourself.

