# Geometry

To Do:

- ❑ Times Table Rockstars
- ❑ Countdown Challenge
- ❑ Angles – recap on work from last week.
- ❑ Polygon sort – sort the shapes into regular and irregular groups.
- ❑ Complete either the consolidate, core or extend task.
- ❑ Name the 3D shapes and write down their features. There are videos to help you.
- ❑ Nets of 3D shapes – look at the nets and decide what 3D shape they will make. Follow the links, there are videos and activities to help you. Write down their features (faces, edges and vertices)
- ❑ Nets of 3D shapes – complete either consolidate, core or extend task.

Use the numbers at the bottom to get as close to the target number as you can. You can use multiplication, division, addition and subtraction. However, you can only use each number **once.**

ADD ➕
SUBTRACT ➖
MULTIPLY ❌
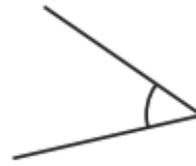DIVIDE ➗
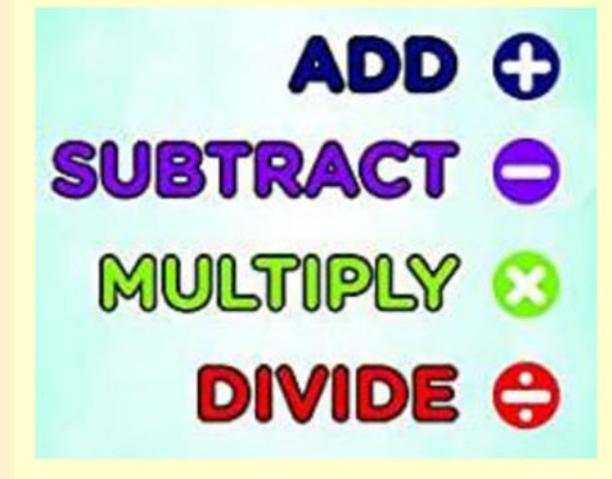
You target is
645

| 75 | 100 | 6 | 3 | 5 | 4 |

Angles

Look at these angles. Do you think they are acute angles, right angles or obtuse angles? Explain why you think this. Your work from last week may help.

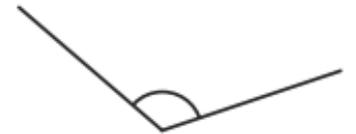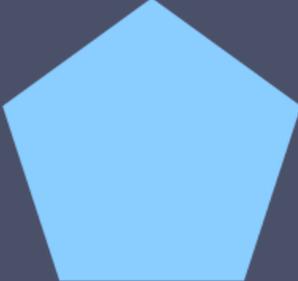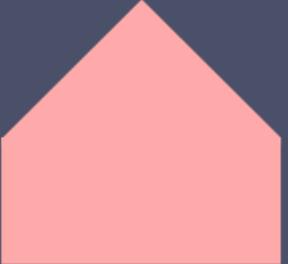| Number on the angle	What type of angle is it?	Explain how you know
1, 2, 3... etc.	Acute, obtuse or right angle	Think about the degrees or how you have estimated it

1.

2.

3.
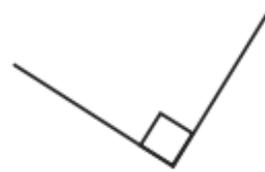
4.
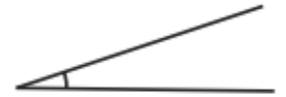
5.
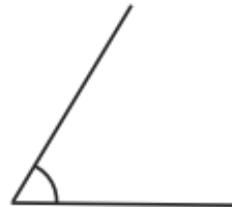
6.

7.

8.
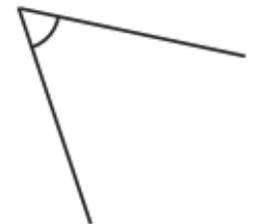
Polygons – regular or irregular?

What is a regular shape?
A regular shape is a 2D shape where all (interior) angles and sides measure the same.

What is an irregular shape?
An irregular shape is a shape which has sides and angles of any length and size.

Shape	Regular	Irregular
Triangle		
Quadrilateral		
Pentagon		
Hexagon		
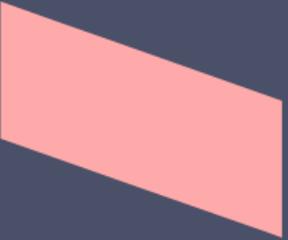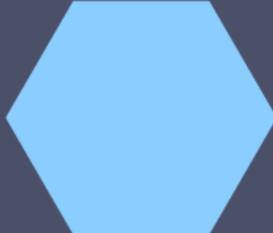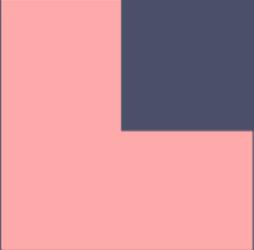
Polygons – regular or irregular?

Task: Sort these into regular or irregular groups.
Challenge: Sort them into 4 groups.
1) Regular *with* at least one right angle
2) Regular with *no* right angles
3) Irregular *with* at least one right angle
4) Irregular with *no* right angles.

1

2

3

4

5

6

7

8

9

10

11
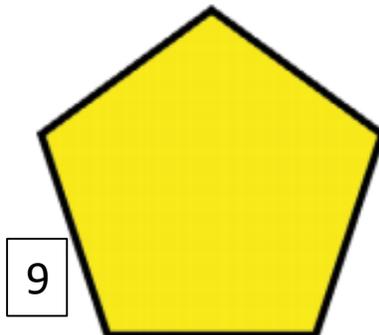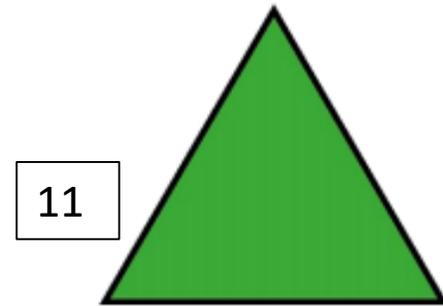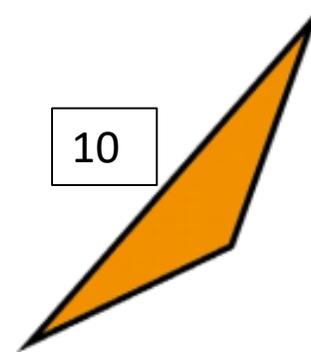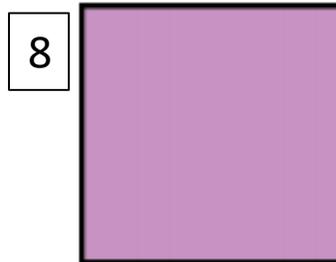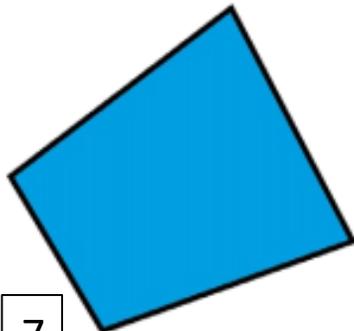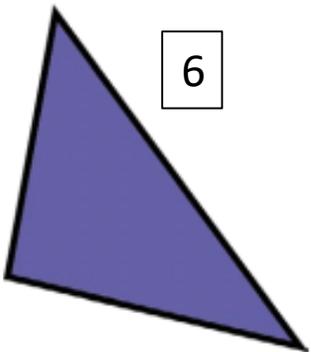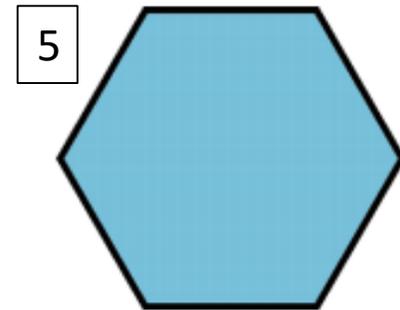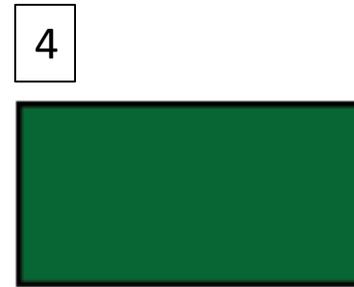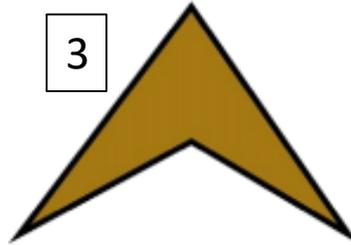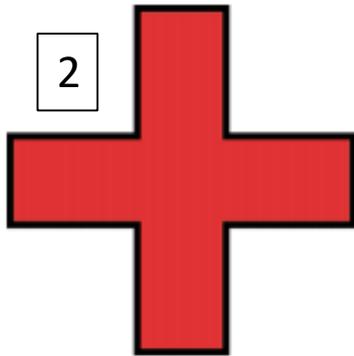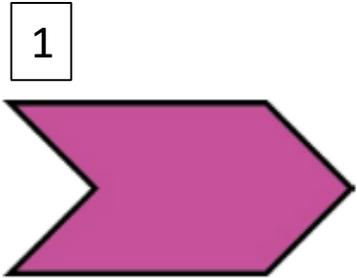
NOW: Write a definition of a regular and irregular polygon.

	Consolidate	Core	Extend

Consolidate

1b. Has Abbie sorted these shapes correctly? Explain your answer.

	Regular Polygon	Irregular Polygon
Has exactly 4 sides	A	C D
Not 4 sides	B	E

2b. Sunita says,

> A rectangle is a regular polygon because it has 4 angles of equal size.
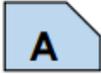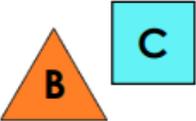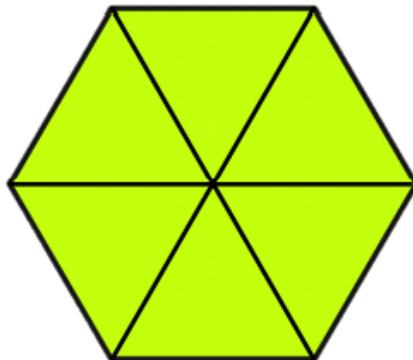
Is Sunita correct? Explain your answer.

Core

4a. Has Shamir sorted these shapes correctly? Explain your answer.

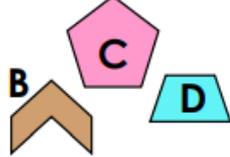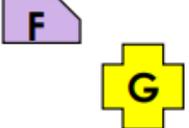|	Regular Polygon	Irregular Polygon
Has exactly 5 sides	A	D
Not 5 sides	B C	E

6a. How many regular polygons can you see in this shape?

Extend

7b. Has Kelly sorted these shapes correctly? Explain your answer.

	Regular Polygon	Irregular Polygon
Has exactly 9 sides	A	E
Not 9 sides	B C D	F G

**9b. How many regular polygons can you see in this shape?**
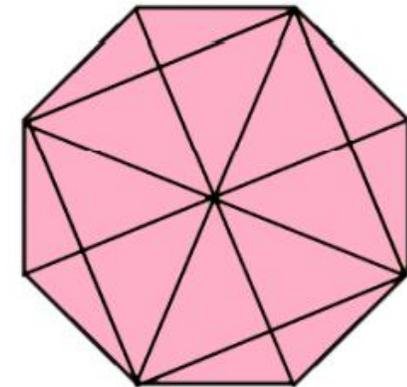
3D Shapes

Task:

1) Write the names of these shapes.

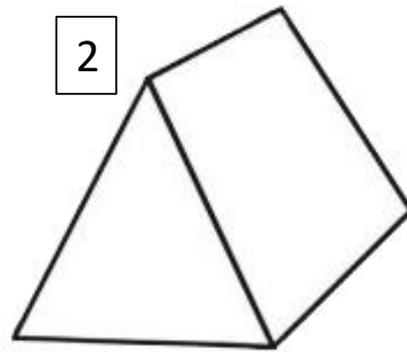2) Write down their features. How many faces, edges and vertices do they have?

Follow the link and watch the video and complete the activities for support with this.

[Recognise and name 3-D shapes - Year 2 - P3 - Maths - Catch Up Lessons - Home Learning with BBC Bitesize - BBC Bitesize](#)
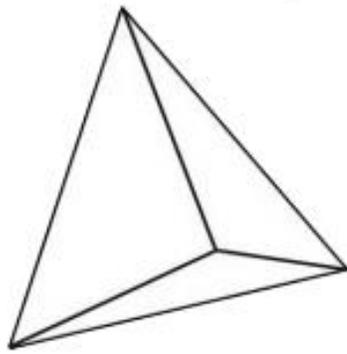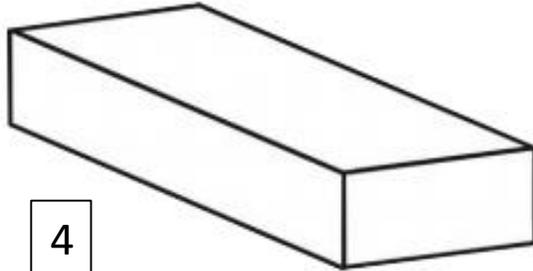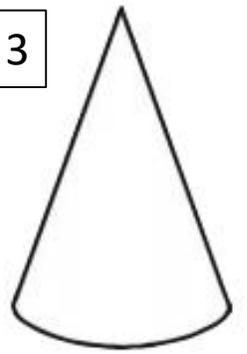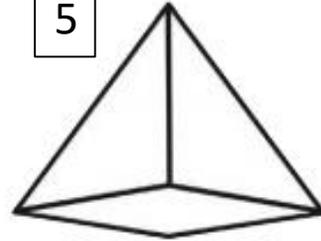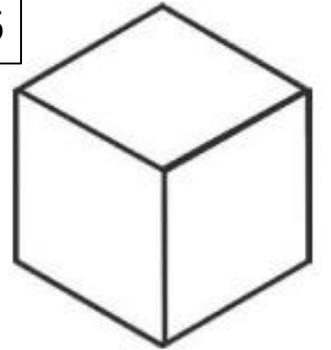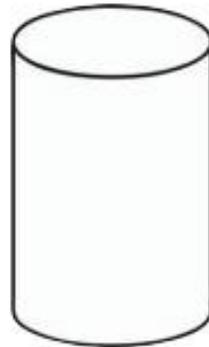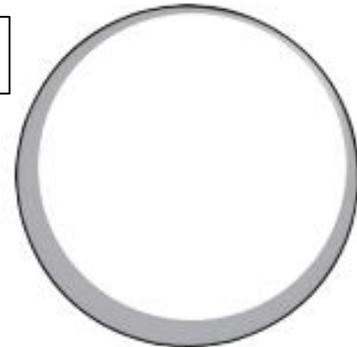
3D Shapes
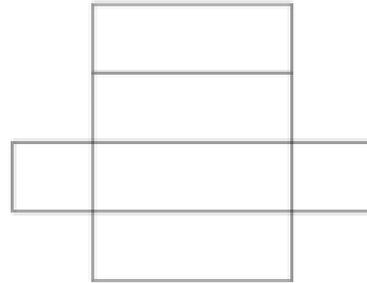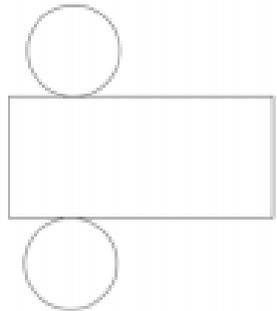
(a)
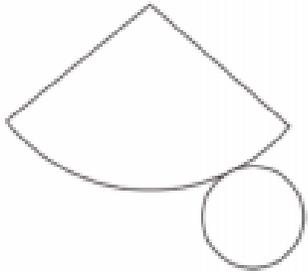
(b)
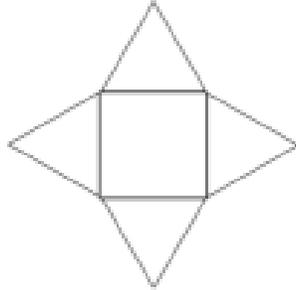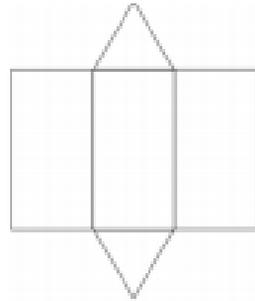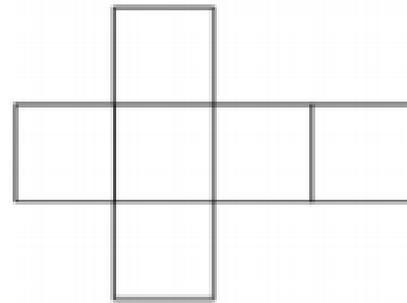
(c)

(d)

(e)

(f)

Tasks:
1) Watch the videos about nets of 3D shapes.
2) Complete the BBC Biteszie home learning page. There is a video, some reading and a quiz.
3) Name the 3D shapes these nets will make. Explain how you knew.
4) For each shape, tell me how many faces, edges and vertices it has.

Consolidate
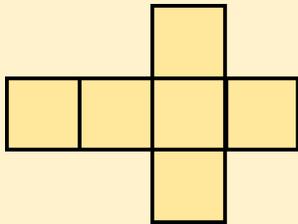## Nets of a square based pyramid

Here are four nets. Which one does NOT make a square based pyramid?
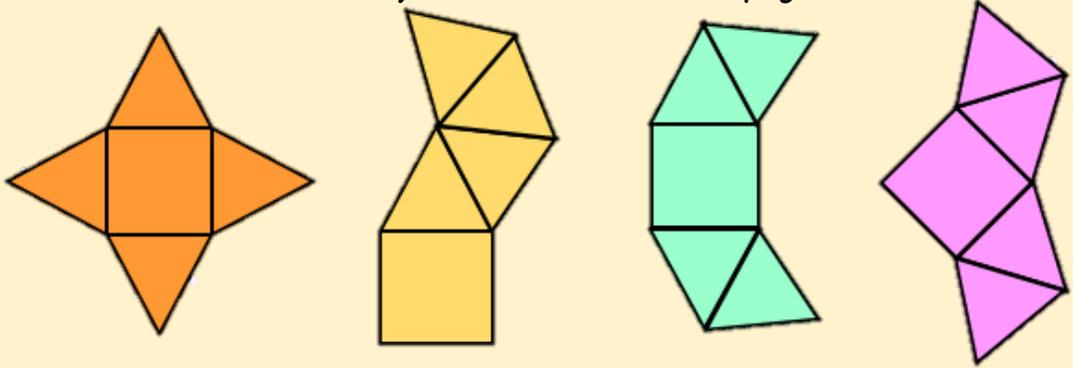
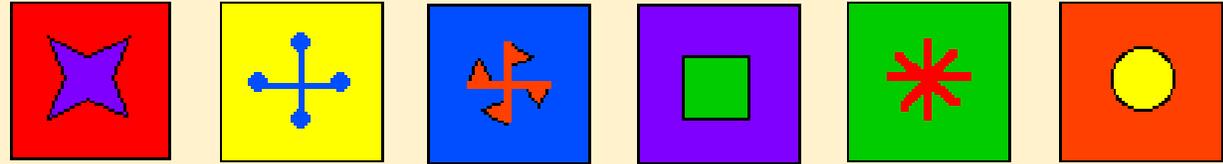How do you know?

Core
Cube Nets

Here is a net of a cube:

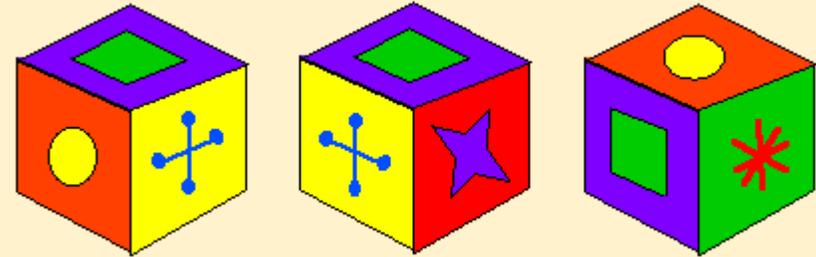How many different nets can you draw that will also make a cube? I think there are at least 8.

Extend
A Puzzling Cube

Here are the six faces of a cube – in no particular order:

Here are three views of the cube:

Can you deduce where the faces are in relation to each other and record them on the net of this cube?

TIP: Try drawing this net several times on paper and cutting it out. Try different patterns until it fits.