



Properties of 2-D polygons

CAPS Statement

Space and Shape

Learners need to know and name different regular and irregular polygons such as:

- triangles
- squares, rectangles
- other quadrilaterals
- pentagons
- hexagons

Notes

Let us assume that you have lost your pet. You want to use of a poster to help you in your search, but you have no photo of your pet. The only information you can put on your poster is to describe how your pet looks. For example:

- What kind of animal is your pet? (this is also the name of the object)
 - What colour is your pet?
 - What is the length of your pet?
- We call the last two points the attributes of your pet. We use attributes to describe an object. A 2-D (two dimensional) object has two attributes, namely length and width (also called breadth).

What is a 2-D polygon?

It is any flat object that has edges that form a closed circuit. For example:



Not a polygon



A polygon

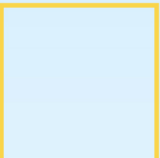
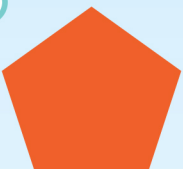
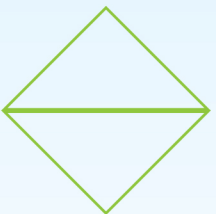
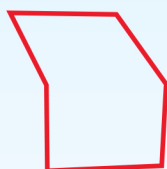
Regular 2-D polygons

Shape	Number of sides	Name
	3	Triangles
	4	Rectangle Also called a quadrilateral Quad means 4
	4	Square (quadrilateral) All edges have equal lengths
	5	Pentagon The word penta - means 5
	6	Hexagon The word hexa - means 6

Irregular 2-D polygons		
Shape	Number of sides	Name
	3	Irregular triangles
	4	Irregular square This specific one is called a trapezium.
	5	Irregular pentagon
	6	Irregular hexagon

Activity 1

Determine the number of edges and give the names of all the shapes below:

a  _____ _____	b  _____ _____	c  _____ _____	d  _____ _____
e  _____ _____	f  _____ _____	g  _____ _____	h  _____ _____

Teacher Tip

Let learners identify different 2-D shapes in their environment. Use anything in learners' suitcases / backpacks, in learner's desks, in your the classroom or on the school grounds.

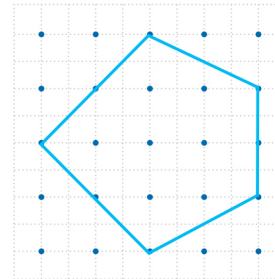
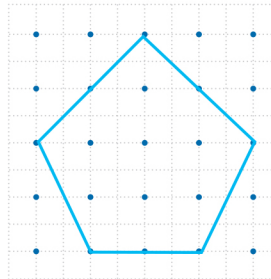


Activity 2

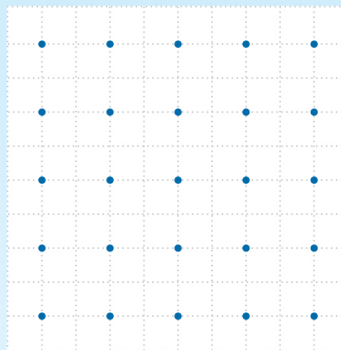
Connect the dots to create the shapes:

Example

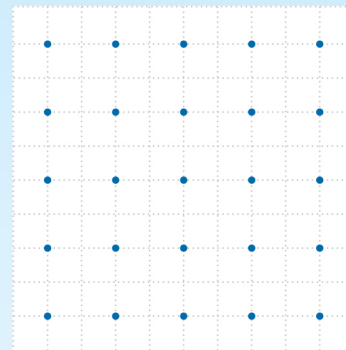
Irregular Hexagon



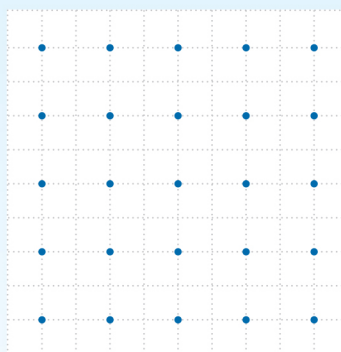
(a) Square



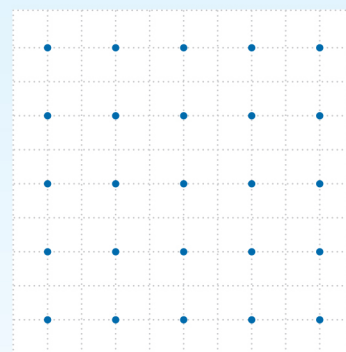
(b) Rectangle



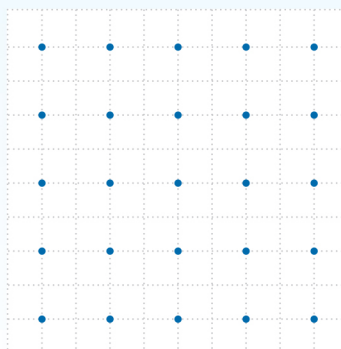
(c) Irregular hexagon



(d) Irregular pentagon



(e) Irregular square



(f) Hexagon

