

Name \_\_\_\_\_

Date \_\_\_\_\_

## Maths vocabulary — answers

40 tasks in five styles, covering every key word in Unit 1.

### A · Unscramble the term — Rearrange the letters to make the term that matches the definition.

**1 nopylog**

A closed shape made of straight sides.

*Example: A hexagon has 6.*

**Answer: polygon**

The word is **polygon** — A closed shape made of straight sides.

**2 eevtrx**

A corner where sides or edges meet.

*Example: A cube has 8.*

**Answer: vertex**

The word is **vertex** — A corner where sides or edges meet.

**3 uarids**

The distance from the centre to the edge.

*Example: Half the diameter.*

**Answer: radius**

The word is **radius** — The distance from the centre to the edge.

**4 eidmater**

The distance right across through the centre.

*Example: Twice the radius.*

**Answer: diameter**

The word is **diameter** — The distance right across through the centre.

**5 rysmmtey**

Balance in a shape, by folding or by turning.

*Example: A square has 4 lines of symmetry.*

**Answer: symmetry**

The word is **symmetry** — Balance in a shape, by folding or by turning.

**6 mrpsi**

A solid with the same cross-section throughout.

*Example: A tent.*

**Answer: prism**

The word is **prism** — A solid with the same cross-section throughout.

**7 dyparim**

A solid rising from a base to a single apex.

*Example: The Great Pyramid.*

**Answer: pyramid**

The word is **pyramid** — A solid rising from a base to a single apex.

**8 dhcro**

A straight line joining two points on a circle.

*Example: A diameter is the longest.*

**Answer: chord**

The word is **chord** — A straight line joining two points on a circle.

**B · Fill in the gaps — Use a word from the box to complete each sentence.**

- 9** A closed shape made of straight sides is a \_\_\_\_\_.

**Word box:** □

**Answer: polygon**

A hexagon is one.

- 10** A polygon with all sides and all angles equal is \_\_\_\_\_.

**Word box:** □

**Answer: regular**

Both conditions are needed.

- 11** The distance from the centre of a circle to its edge is the \_\_\_\_\_.

**Word box:** □

**Answer: radius**

It is half the diameter.

- 12** The distance right across a circle through the centre is the \_\_\_\_\_.

**Word box:** □

**Answer: diameter**

It is twice the radius.

- 13** The distance all the way round a circle is its \_\_\_\_\_.

**Word box:** □

**Answer: circumference**

It is the perimeter of a circle.

- 14** A line a shape folds along so the halves match is a line of \_\_\_\_\_.

**Word box:** □

**Answer: symmetry**

A rectangle has two.

- 15** A flat shape that folds up into a solid is a \_\_\_\_\_.

**Word box:** □

**Answer: net**

A cube has eleven.

- 16** A solid with the same cross-section all the way along is a \_\_\_\_.

**Word box:** □

**Answer: prism**

A tent is a triangular one.

**C · Choose the correct ending — Pick the reason that correctly finishes each sentence.**

- 17** The exterior angles of any polygon total  $360^\circ$  because ...

- ☐ all polygons are regular
- ☐ walking right round the outside turns you through one full turn
- ☐ the interior angles total  $360^\circ$

**Answer: walking right round the outside turns you through one full turn**

It holds whatever the number of sides.

- 18** The interior angles of an  $n$ -gon total  $180(n - 2)^\circ$  because ...

- ☐ there are  $n$  angles
- ☐ it splits into  $n - 2$  triangles
- ☐ each angle is  $180^\circ$

**Answer: it splits into  $n - 2$  triangles**

Draw every diagonal from one vertex.

- 19** A rectangle is not a regular polygon because ...

- ☐ its angles are unequal
- ☐ its sides are not all equal
- ☐ it has four sides

**Answer: its sides are not all equal**

Regular needs equal sides *and* equal angles.

- 20** A parallelogram has order 2 but no lines of symmetry, which shows ...

- ☐ it has no symmetry
- ☐ the two kinds of symmetry are independent
- ☐ the order must be wrong

**Answer: the two kinds of symmetry are independent**

Always check for each separately.

- 21** The smallest order of rotational symmetry is 1 because ...

- ☐ every shape has some symmetry
- ☐ a full turn always maps a shape onto itself
- ☐ 0 is not a number

**Answer: a full turn always maps a shape onto itself**

So order 0 is never correct.

- 22** Euler's rule  $F + V - E = 2$  is useful because ...

- ☐ it gives the volume
- ☐ it checks a count of faces, edges and vertices
- ☐ it names the solid

**Answer: it checks a count of faces, edges and vertices**

If the total is not 2, a count is wrong.

**D · Match the definition — Type the term that matches each definition.**

- 23** Which term means: *A closed shape made of straight sides.*  
**Answer: polygon**  
**polygon** — A hexagon has 6.
- 24** Which term means: *All sides equal and all angles equal.*  
**Answer: regular polygon**  
**regular polygon** — A square.
- 25** Which term means: *An angle inside a polygon at a vertex.*  
**Answer: interior angle**  
**interior angle** —  $108^\circ$  in a regular pentagon.
- 26** Which term means: *The angle between a side and the next side extended.*  
**Answer: exterior angle**  
**exterior angle** — They total  $360^\circ$ .
- 27** Which term means: *The distance from the centre to the edge.*  
**Answer: radius**  
**radius** — Half the diameter.
- 28** Which term means: *The distance right across through the centre.*  
**Answer: diameter**  
**diameter** — Twice the radius.
- 29** Which term means: *The distance all the way round a circle.*  
**Answer: circumference**  
**circumference** — Its perimeter.
- 30** Which term means: *A straight line joining two points on a circle.*  
**Answer: chord**  
**chord** — A diameter is the longest.
- 31** Which term means: *A line a shape folds along so the halves match.*  
**Answer: line of symmetry**  
**line of symmetry** — A rectangle has 2.
- 32** Which term means: *How many times a shape looks the same in a full turn.*  
**Answer: order of rotational symmetry**  
**order of rotational symmetry** — A parallelogram has order 2.
- 33** Which term means: *A flat surface of a solid.*  
**Answer: face**  
**face** — A cube has 6.
- 34** Which term means: *A flat shape that folds into a solid.*  
**Answer: net**  
**net** — A cube has 11 nets.

**E · Reading shape questions — What the instruction words are asking for.**

**35** A question says “name the polygon”. What is wanted?

- ☐ The number of sides
- ☐ The word, such as hexagon
- ☐ The angle sum
- ☐ A drawing

**Answer: The word, such as hexagon**

Give the name, not the count.

**36** A question says “state the order of rotational symmetry”. What form should the answer take?

- ☐ An angle
- ☐ A whole number
- ☐ A word
- ☐ A drawing

**Answer: A whole number**

For example 4, not  $90^\circ$ .

**37** A question says “sketch the net”. What must your drawing show?

- ☐ The solid in 3D
- ☐ Every face, laid flat and joined at the edges
- ☐ Just the base
- ☐ The volume

**Answer: Every face, laid flat and joined at the edges**

Each face exactly once.

**38** What does “regular” mean in a shape question?

- ☐ Common
- ☐ All sides and all angles equal
- ☐ Symmetrical
- ☐ Having an even number of sides

**Answer: All sides and all angles equal**

Both, not one.

**39** A question says “explain why”. What earns the mark?

- ☐ The answer alone
- ☐ A reason, such as “exterior angles total  $360^\circ$ ”
- ☐ A drawing
- ☐ A calculation

**Answer: A reason, such as “exterior angles total  $360^\circ$ ”**

Name the rule you used.

**40** What is the plural of vertex?

- ☐ vertexes
- ☐ vertices
- ☐ vertex
- ☐ vertexi

**Answer: vertices**

One vertex, several vertices.