Use vocabulary from previous year and extend to:
view, plan, elevation… isometric…

Know and use geometric properties of cuboids and shapes made from cuboids; begin to use plans and elevations. For example:

- Describe 3-D shapes which can be visualised from a wall poster or a photograph.

- Visualise and describe relationships between the edges of a cube, e.g. identify edges which:
  – meet at a point;
  – are parallel;
  – are perpendicular;
  – are neither parallel nor intersect each other.

- Imagine a cereal packet standing on a table.
  Paint the front and the back of the packet red.
  Paint the top and bottom red and the other two faces blue.
  Now study the packet carefully.
  How many edges has it?
  How many edges are where a red face meets a blue face?
  How many edges are where a red face meets another red face?
  How many edges are where a blue face meets another blue face?

- Sit back to back with a partner.
  Look at the picture of the model.
  Don't show it to your partner.
  Tell your partner how
  to build the model.
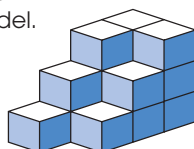
- Sketch a net to make
  this model.
  Construct the shape.
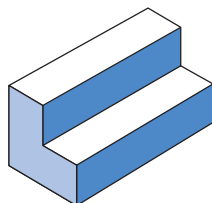
- Here are three views of the same cube.
  Which letters are opposite each other?

Use vocabulary from previous years and extend to:
cross-section, projection…
plane…

Analyse 3-D shapes through 2-D projections and cross-sections, including plans and elevations.
For example:

Visualise solids from an oral description. For example:

- In each case, identify the solid shape.
  a. The front and side elevations are both triangles and the plan is a square.
  b. The front and side elevations are both rectangles and the plan is a circle.
  c. The front elevation is a rectangle, the side elevation is a triangle and the plan is a rectangle.
  d. The front and side elevations and the plan are all circles.

- The following are shadows of solids.
  Describe the possible solids for each shadow (there may be several solutions).

- In each case, identify the solid shape.
  Draw the net of the solid.

  a.

  | front | side | plan |

  b.

  | front | side | plan |
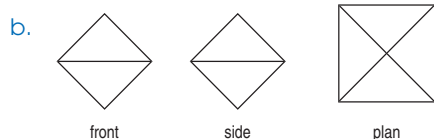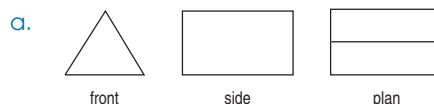
- Write the names of the polyhedra that could have an isosceles or equilateral triangle as a front elevation.