THREE-DIMENSIONAL SHAPES

A THREE-DIMENSIONAL SHAPES

A.1 IDENTIFYING FLAT OR SOLID SHAPES

MCQ 1: Is this shape flat or solid?

- Pick the right answer:
 - \Box 2D shape
 - \Box 3D shape



Pick the right answer:

- $\Box~$ 2D shape
- \Box 3D shape





Pick the right answer:

- \square 2D shape
- $\Box~$ 3D shape

MCQ 4: Is this shape flat or solid?



Pick the right answer:

 \square 2D shape

 $\Box~$ 3D shape

MCQ 5: Is this shape flat or solid?



Pick the right answer:

- \Box 2D shape
- \Box 3D shape





Pick the right answer:

- $\Box~$ 2D shape
- $\Box~$ 3D shape

A.2 COUNTING FACES





Ex 8: How many faces does this square Pyramid have?



Ex 9: How many faces does this triangular pyramid have?



Ex 10: How many faces does this eight-faced die have?



A.3 COUNTING EDGES

Ex 11: How many edges does this cube have?











A.4 COUNTING VERTICES

Ex 14: How many vertices does this cube have?



Ex 15: How many vertices does this eight-faced die have?



Ex 16: How many vertices does this triangular pyramid have?



B POLYHEDRON

B.1 IDENTIFYING POLYHEDRONS

MCQ 17: Is this 3D figure a polyhedron?



Choose one answer:

- \Box True
- \Box False





Choose one answer:

 \Box False

MCQ 19: Is this 3D figure a polyhedron?





Choose one answer:

- \Box True
- $\Box\,$ False





Choose one answer:

 \Box True

 \Box False

C CROSS SECTIONS

C.1 IDENTIFYING UNIFORM CROSS SECTION

MCQ 21: Does this 3D shape have a uniform cross section?



Choose one answer:

 \Box True

 \Box False





Choose one answer:

- \Box True
- \Box False

MCQ 23: Does this 3D shape have a uniform cross section?



Choose one answer:

 \Box False

MCQ 24: Does this building have a uniform cross section?



Choose one answer:

- \Box True
- \Box False

MCQ 25: Does this 3D shape have a uniform cross section?



Choose one answer:

- \Box True
- \Box False

D CLASSIFICATION

D.1 CLASSIFYING 3D SHAPES

MCQ 26: Which 3D shape is shown below?



(°<u>+</u>°)

Choose one answer:

 \Box Cone

- \Box Cylinder
- $\Box\,$ Triangular prism

MCQ 27: Which 3D shape is shown below?



Choose one answer:

 \Box Cone

- \Box Triangular prism
- \Box Rectangular prism





The shape above matches this description.





Choose one answer:

- \Box Cylinder
- \Box Triangular prism
- $\Box\,$ Rectangular prism





Choose one answer:

- \Box Cylinder
- $\Box\,$ Cone
- \Box Sphere

MCQ 31: Which 3D shape is shown below?



Choose one answer:

- \Box Rectangular pyramid
- $\hfill\square$ Square pyramid
- \Box Cube

E DRAWING THREE-DIMENSIONAL SHAPES

E.1 COUNTING VISIBLE AND HIDDEN EDGES

Ex 32: Count the number of visible and hidden edges on this cube



Ex 33: Count the number of visible and hidden edges on this eight-faced die.



Ex 34: Count the number of visible and hidden edges on this square Pyramid.



E.2 DRAWING THREE-DIMENSIONAL SHAPES

Ex 35:



Draw this cube on your graph paper.



Ex 36:



Draw this cube on your graph paper.







Draw this triangular prism on your graph paper.



Ex 38:



Draw this pyramid on your graph paper.



F MULTI-VIEW PROJECTION

F.1 FINDING THE PROJECTION

MCQ 39: Identify the front view of this solid.











MCQ 40: Identify the top view of this solid.









left back front right Bottom

 top



Choose one answer:











Choose one answer:



F.2 DRAWING THE PROJECTION







 \mathbf{Ex} 44: Draw the right view of this solid on your graph paper.







Ex 46: Draw the front view of this solid on your graph paper.





G SOLID CONSTRUCTIONS

G.1 IDENTIFYING NETS

MCQ 47: Identify the net that can be folded to form this 3D shape.









MCQ 48: Identify the net that can be folded to form this 3D shape.



 \mathbf{MCQ} 49: Identify the net that can be folded to form this 3D shape.

Choose one answer:









Choose one answer:



MCQ 50: Identify the net that can be folded to form this 3D shape.



Choose one answer:













G.2 CONSTRUCTING 3D SOLIDS FROM PAPER

Ex 51: Draw this net on graph paper. Cut it out (keeping the tabs), fold it, and glue the tabs to form a cube. You can decorate its different faces. I look forward to seeing your photographs.



Ex 52: Draw this net on graph paper. Cut it out (keeping the tabs), fold it, and glue the tabs to form a square-based pyramid. You can decorate its different faces. I look forward to seeing your photographs.