Name_____ Date_____ Period_____

LESSON 5-6 · SESSION 2 · PRACTICE · FORM A

Reading Nets and Solids

Learning target – I can name the solid a net makes by reading the shapes in the net. · 6.G.A.4

REMEMBER

- **Prism**: 2 matching bases + rectangles. **Pyramid**: 1 base + triangles that meet at a point.
- The **base shape** names the solid: triangular, square, pentagonal, hexagonal.
- A **face** is flat, an **edge** is where faces meet, a **vertex** is a corner. Count them on the folded solid.

WORKED EXAMPLE

A net has 1 square and 4 triangles.

Step 1 1 + 4 = 5 faces.

Step 2 One square base + triangles: square pyramid.

Step 3 Edges 4 + 4 = 8; vertices 4 + 1 = 5.

Answer **square pyramid: 5 faces, 8 edges, 5 vertices**

WORDS **edge** *(arista)* · **vertex** *(vértice)* · **base** *(base)*

PRACTICE

show your work · label units

1. Name the solid each net makes.

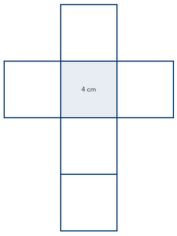
a. 2 pentagons + 5 rectangles: _____

b. 4 triangles: _____

c. 6 identical squares: _____

d. 2 octagons + 8 rectangles: _____

2. **Mystery Net.** A net shows 6 identical squares, each 4 cm on a side.



a. Name the solid. _____

b. Faces, edges, vertices _____

c. Area of one face _____ cm²

d. Area of all the faces _____ cm²

3. **Fold the Net.** A net has 2 rectangles 9 in by 5 in, 2 rectangles 9 in by 3 in, and 2 rectangles 5 in by 3 in.

Hint *Add all six faces.*

a. Name the solid. _____

b. Total area _____ in²

Show your work.

4. **Game Box.** A net has 2 squares 12 in by 12 in and 4 rectangles 12 in by 3 in.

a. Name the solid. _____

b. Total area _____ in²

Show your work.

5. Cube Count. A storage cube has 7 cm edges.

Hint *Edges are the lines. Vertices are the corners.*

a. Faces, edges, vertices _____

b. Area of one face _____ cm²

Show your work.

6. Ravi's Claim. Ravi sees a net of 1 square and 4 triangles. Ravi says it folds into a triangular prism. Is Ravi right?

Hint *Count the bases. One base means a pyramid.*

Show your work.

Solid_____

7. Ornament Net. A net has 1 triangle base with 3 triangles around it. Each outer triangle has a base of 9 cm and a height of 8 cm.

Hint *Use the triangle formula on one outer face.*

Show your work.

Solid; area of one outer triangle_____

8. Three Nets. Net 1: 2 triangles + 3 rectangles. Net 2: 1 square + 4 triangles. Net 3: 6 rectangles in 3 matching pairs.

a. Name the solid each net makes. _____

b. Explain how you tell a prism from a pyramid. _____

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. Nadia's Work. Nadia says a cube has 6 faces, 6 edges, and 6 vertices, because everything about a cube comes in sixes. Explain the mistake and give the correct counts.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. A prism is named for the shape of its –

A bases **B** tallest face **C** edges **D** vertices

11. A net with 1 hexagon and 6 triangles makes a –

A hexagonal prism

B hexagonal pyramid

C cube

D triangular pyramid

SELF-CHECK CODE *find your answer · copy its letter into that problem's box · spell a math word*

16	36	49	96	174	72	432	87
S	S	D	O	L	Q	I	Z

#2c	#2d	#3b	#4b	#5b	#7

CHECK YOURSELF	☐ I can do this on my own	☐ I need a little help	☐ I have a question about #___