

### 9.3 Homework/Classwork

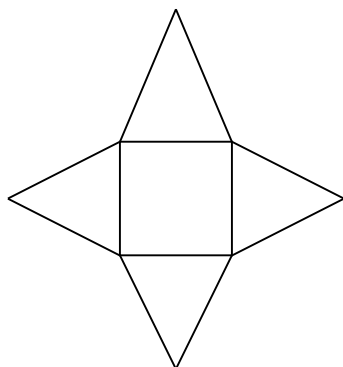
MINDS ON:

#### **Activity #1**

1. Each student will be given a piece of paper or cardstock.
2. Make a small box to hold pencils and pens. Construct it however you want!
3. How did you make your box? Did you use a net or patterns?

#### HOMEWORK/CLASSWORK

1. Brainstorm 3 examples of nets and patterns in real life.
2. Given the following net, think of what it would form if it was folded up into a 3-D figure. Sketch the figure.

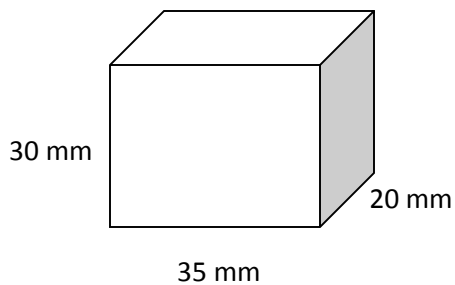


3. Determine another example of a net. Name the figure and then draw the corresponding net in the space below.

4. Draw the net of the following objects using appropriate scales on graph paper.

a) a triangular prism with triangle side lengths 10cm and prism height 30cm.

b)



5. Create a pattern for a cube with all dimensions 5 cm. Allow for flaps to join the parts together. Assemble the pattern to form the cube.
6. How would the net of a box with a closed top differ from the net of the same box with an open top? Sketch the net for each case to demonstrate the difference.
7. Draw a net that may appear to fold up into a closed 3-D object, but really does not. Explain why it does not create a closed object.

### Activity #2

1. Students will be put into groups
2. Each group will be given a different 3-D figure (i.e., a cube, triangular prism, pyramid, etc.)
3. Your group is to construct your figure twice:
  - a) once by creating a net of the shape and then folding it up and securing it
  - b) the other by creating a pattern of the shape and joining all of the pieces.
  - c) You will be presenting your figure to the class.