LEARNING GUIDE 5: **SURFACE AREA**

Ref: Math Links 8 (Chapter 5, pp. 164 - 188)

NAME: _____ TA: _____ TEACHER: _____

LEARNING GUIDE EXPECTATIONS:

(1) Label and draw views of 3-D objects
(2) Draw and build nets for 3-D objects
(3) calculate surface area for prisms
(4) Calculate the surface area for cylinders

ASSIGNMENTS:

Expectation 1: label and draw vies of 3-D objects

- ☐ Watch & take notes in the journal
- ☐ Watch & take notes in the journal
- ☐ Assignment 1: p. 168-169 — #3, 4, 8, 9
- ☐ Assignment 2: p. 169 — #5
- ☐ Assignment 3: p. 169 — #6, 7

Expectation 2: draw and build nets for 3-D objects

- ☐ Watch & take notes
- ☐ Assignment 4: p. 173-174 — #3, 4, 5, 9
- ☐ Assignment 5: p. 174-175 — #6, 7, 8, 10

Expectation 3: calculate the surface area for prisms

- ☐ Watch & take notes
- ☐ Assignment 6: p. 180-181 — #3, 4, 13,
- ☐ Assignment 7: p. 180-181 — #5, 6, 8, 11, 12

Expectation 4: calculate the surface area for cylinders

- ☐ Watch & take notes
- ☐ Assignment 8: p. 186-187 — #3, 4, 5, 6, 7, 8, 9, 10

- ☐ **Review and Challenge**: p. 188 #7-15, 17, 19

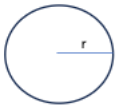
Area Formulas



length x width

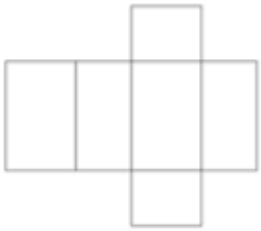
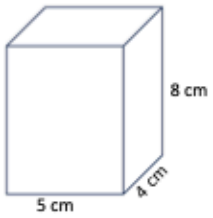
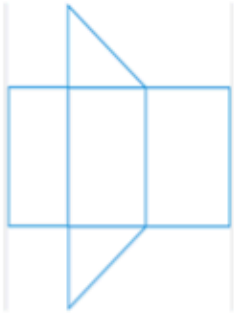
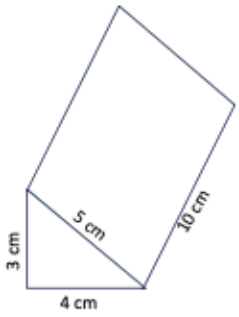
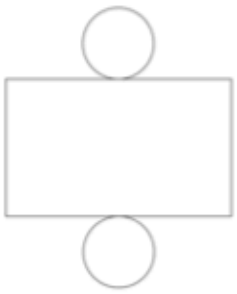
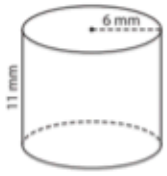


base x height ÷ 2



πr^2 means..... $\pi \times r \times r$

Circumference = $\pi \times d$

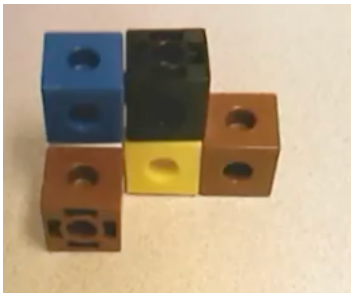
Net	3D Object	Surface Area
		front & back side & side top & bottom **Total**
		Triangle Triangle Rectangle Rectangle Rectangle **Total**
		r = d = Circle 1 Circle 2 Sleeve circumference x h **Total**

NAME: _____

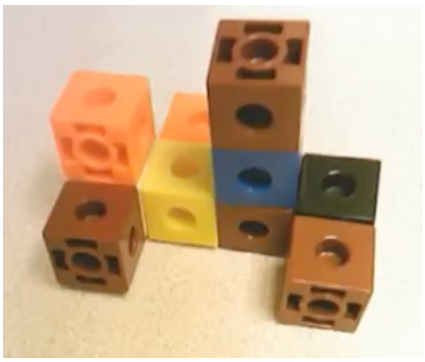
EXPECTATION 1: LABEL AND DRAW VIEWS OF 3-D OBJECTS

☐ **WATCH** videos on drawing views from 3-D objects

Example 1



Example 2.

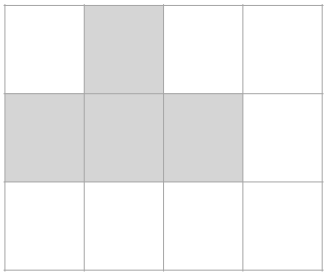


NAME: _____

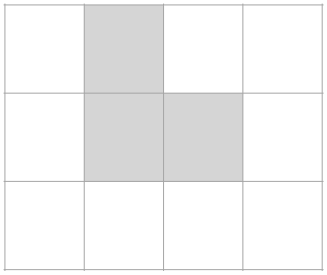
EXPECTATION 1: LABEL AND DRAW VIEWS OF 3-D OBJECTS

☐ **WATCH** videos on drawing 3-D objects from views

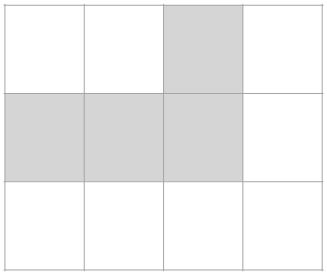
Front

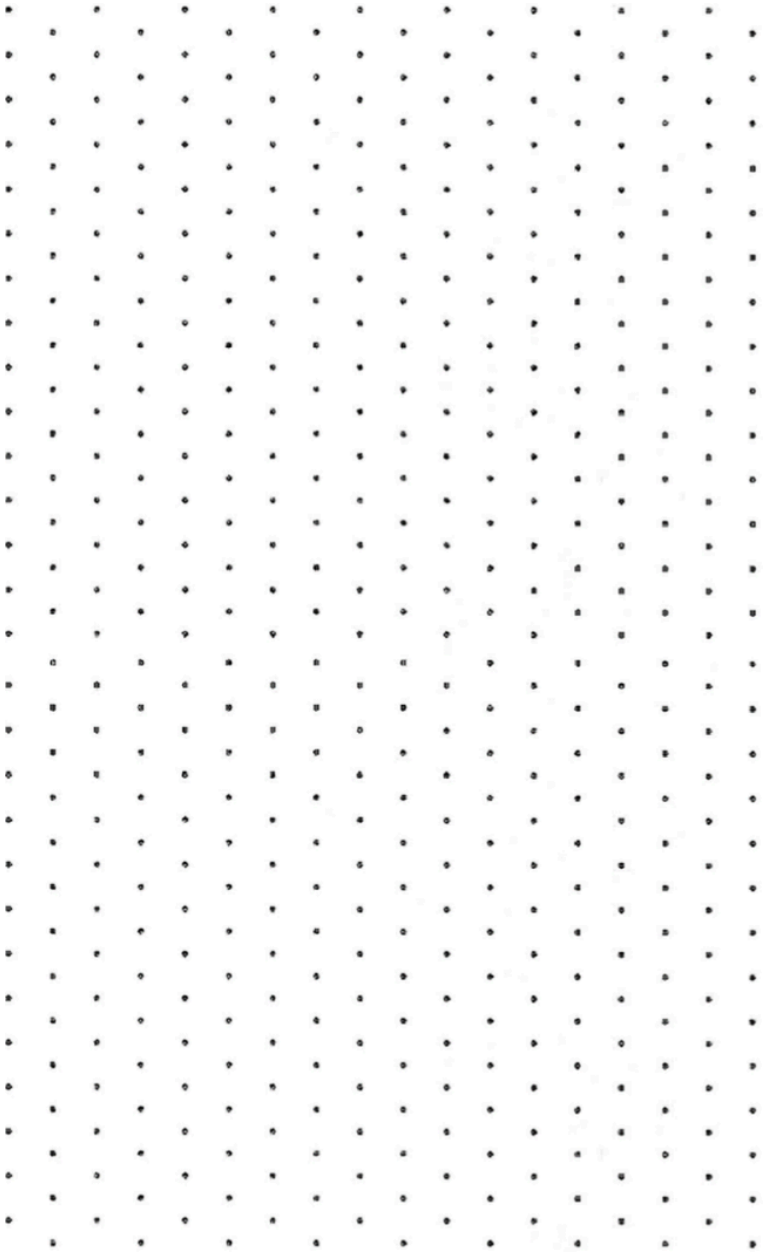


Side



Top





EXPECTATION 3 & 4:

In the space below, draw a real life example of each shape, label the relevant side lengths then calculate the total surface area.

RECTANGULAR PRISM

TRIANGULAR PRISM

CYLINDER