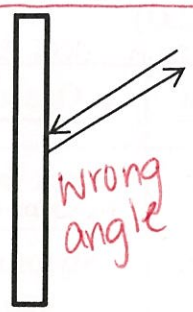
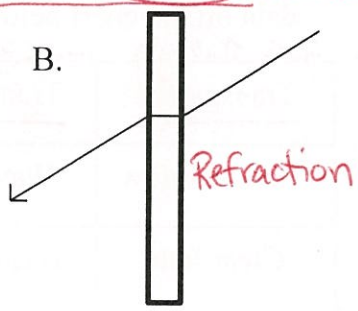
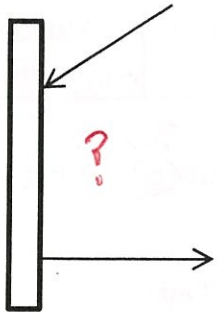
Guided Practice W8 — power up STAAR to science — Readiness Standard 5.6.C

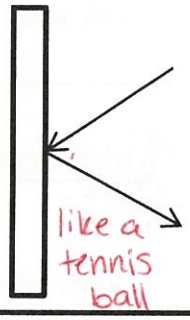
Name _____ Date _____

1. Which diagram best represents reflection? Bounce

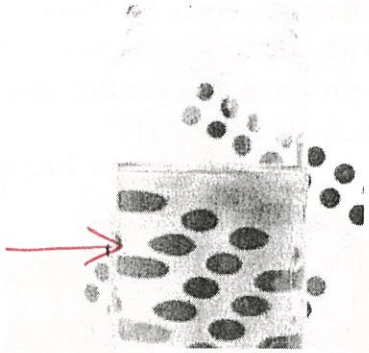
A. 

B. 

C. 

D. 

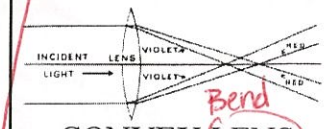
2. A student drew colored circles on a piece of paper and placed it behind a glass jar half full of water.



Why do the colored circles in the lower part of the jar appear larger than the circles in the upper part?

F. Light rays are refracted (Bend) when they travel through the water.
G. Light rays are reflected (Bounce) when they travel through the top of the jar.
H. Light rays travel in a straight line (transmit) when they go through the water.
J. Light rays disappear (Absorbed) when they travel through water.

3. Students are given examples of light energy and are asked to sort them into two categories. The results are shown below. (5.2.D)

A	B
 MIRROR	 Bend PRISM
 CD	 Bend CONVEX LENS
 ALUMINUM FOIL	 Bend READING GLASSES
 BIKE REFLECTOR	 Bend STRAW IN WATER

The objects in column B are examples of –

A. refraction Bend
B. absorption stop
C. reflection Bounce
D. radiation ?

4. Which of the following correctly identifies how light travels?

F. Light travels in waves and vibrates. Sound
G. Light travels in straight lines called rays. ✓
H. Light travels in a back and forth motion. ✗
J. Light travels in a spinning motion. ✗

5. Which object absorbs the most light?

A. white shirt Reflects
B. mirror Reflects
C. black shirt Absorbs
D. water Refracts

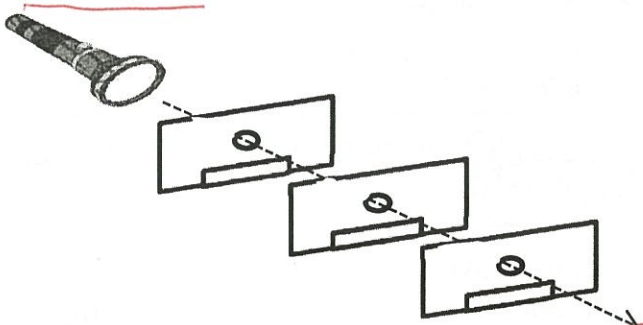
Name _____ Date _____

6. English philosopher Roger Bacon invented the magnifying glass, also known as a hand lens, in the year 1250. A magnifying glass has a convex lens which is used to produce a magnified image of an object. (5.3.D)

Which answer choice best explains how the convex lens works to magnify an object?

F. The light strikes the convex lens and reflects light.
G. The light transmits through the convex lens and refracts light.
H. The light is absorbed in the convex lens.
J. The convex lens makes the light brighter.

7. Students shine a flashlight through three index cards with a hole in each. The index cards are lined up and placed vertically on the table. The students notice the light can be seen through all the index cards. (5.2.D)



What does this experiment prove about the path light travels?

A. Light travels through every type of matter.
B. Light travels in a straight path.
C. Light bends through every type of matter.
D. Light does not travel.

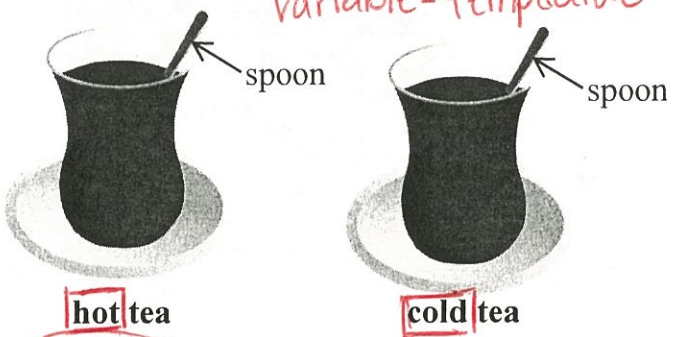
8. A group is experimenting with light and collects data on the chart below. (5.2.G)

Transparent	Translucent	Opaque
Glass window	Wax paper	Black fabric
Clear lens	Tissue paper	Styrofoam cup
Saran wrap	Frosted glass	Aluminum foil

Which example on the chart reflects the most light?

F. glass window
G. tissue paper
H. aluminum foil
J. black fabric

9. Students are learning about light energy and refraction. They set up an experiment like the one shown below and observe the spoon from the side of each glass. (5.2.B)



Which question were the students most likely trying to answer?

A. Does the temperature of a liquid affect refraction?
B. Does the temperature of a liquid affect reflection?
C. Can light pass through tea?
D. Can tea absorb light?