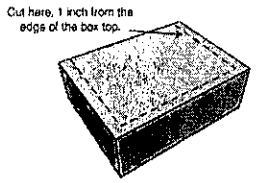
Independent Practice WK9 — power up STAAR to science — **Readiness Standard 5.6.C**

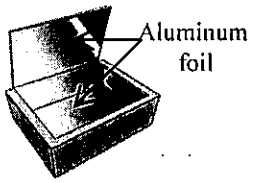
Name_____ Date_____

1. A student constructs a solar oven for a science fair project. The directions are shown below.

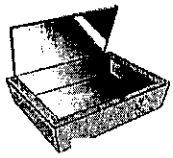
1. Cut a three sided flap out of the top of a box.



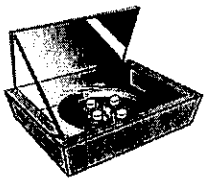
2. Cover the inside of the flap and the inside of the box with aluminum foil.



3. Tape two layers of plastic wrap across the opening in the box.



4. Put your solar oven to work. Place it in direct sunlight with the flap propped.



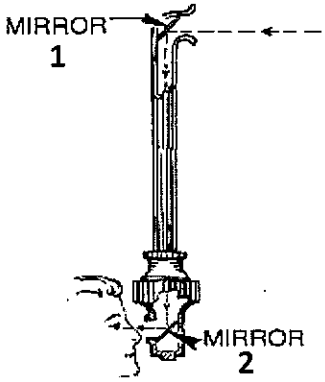
Why does step two say to cover the inside of the box with aluminum foil? (5.2.D)

A. The aluminum foil traps in heat.
B. The aluminum foil is shiny and reflects sunlight toward the food in the center.
C. The aluminum foil absorbs all the sunlight and cooks the food.
D. The aluminum foil refracts the heat.

2. Which of the following does **NOT** refract light?

F. telescope
G. hand lens
H. glass of water
J. bicycle mirror

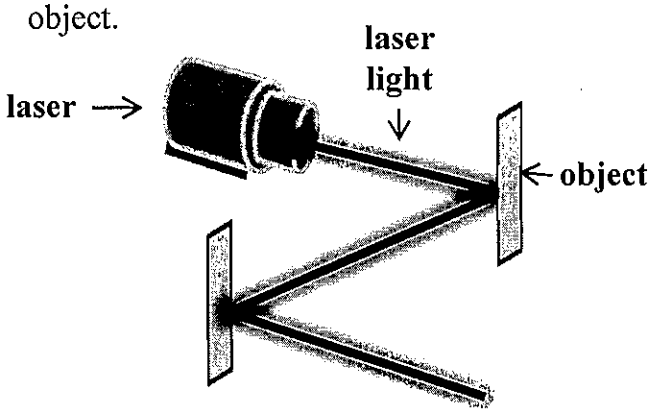
3. The model shows a periscope which can be used to see over walls or around corners. Light enters the periscope and strikes two different mirrors to change its direction. (5.3.C)



Once the light hits mirror 2 and leaves the periscope, it travels –

A. back through the periscope.
B. in a circular motion.
C. in a straight line.
D. back to mirror one.

4. The picture below shows a large laser pointing at an object and how it reacts once it strikes the object.

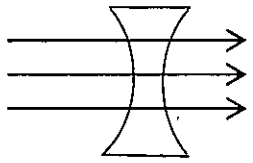


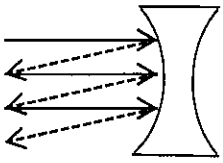
The laser is most likely pointing to which type of medium? (5.2.D)

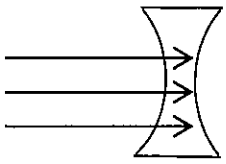
F. water
G. a mirror
H. a book
J. wax paper

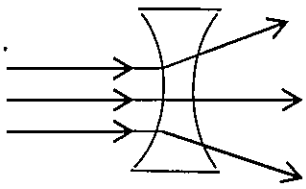
Name_____ Date_____

5. Below is a transparent lens. Which answer choice shows how light reacts after it travels through a lens like the one shown? (5.2.D)

A. 

B. 

C. 

D. 

6. Which statement is **NOT** true about light?

F. Light travels in a straight line until it strikes an object.
G. Light is reflected when it strikes a shiny surface.
H. Light cannot travel through one medium to another.
J. Light refracts when it travels through water.

7. Below is a transparent prism sitting on top of a row of crayons. When light travels through the air and into the prism, it bends and makes the appearance of the crayons look broken. (5.6.C)

Which answer choice is another example of light bending?

A. when light hits a shiny surface
B. when light travels through air
C. when light travels through a glass of water
D. when light hits a dark colored surface

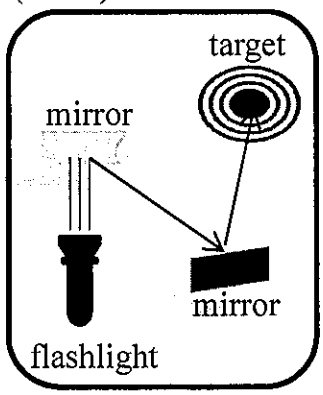
8. A group of students collected data during an experiment and classified all the objects into two groups. The table below shows how they classified the objects. (5.2.D)

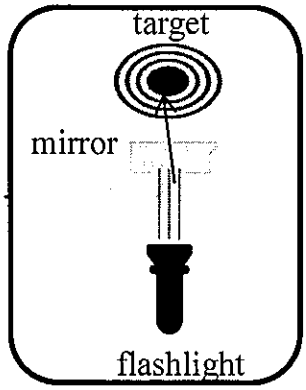
Group 1	Group 2
Metal spoon	Prism
White paint	Magnifying glass
mirror	Concave lens

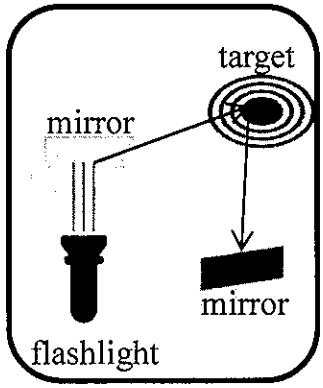
Which answer choice is the most appropriate title for group 1?

F. Refractors
G. Reflectors
H. Translucent
J. Transparent

9. Students are asked to create a system using two mirrors and a flashlight to hit a target with a beam of light. Which diagram correctly uses the two mirrors and the flashlight to hit the target? (5.3.A)

A. 

B. 

C. 

D.