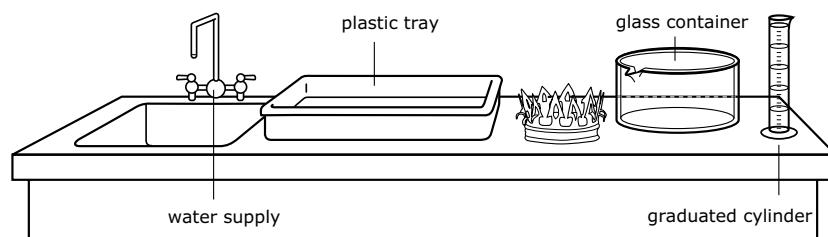


Content Domain	Main Topic	Cognitive Domain
PHYSICS	Forces and Motion	Reasoning and Analysis

Metal crown: procedure to find volume of crown

The scientists then needed to find the volume of the crown in order to determine its density. The following equipment and materials were available for them to use.



Describe a procedure that the scientists could use to find the volume of the crown using some or all of the equipment and materials shown above. You may use diagrams to help explain your procedure.

Item Number: S032711

Overall Percent Correct

Singapore	38	▲
Japan	36	▲
Hong Kong, SAR	33	▲
Korea, Republic of	33	▲
Chinese Taipei	32	▲
Jordan	27	▲
Russian Federation	25	▲
Estonia	21	▲
Lithuania	20	▲
Slovak Republic	20	▲
Sweden	19	▲
Slovenia	19	▲
United States	17	▲
Belgium (Flemish)	16	▲
New Zealand	16	○
Hungary	15	○
Israel	15	○
Australia	14	○
International average	13	
Romania	13	○
Latvia	13	○
Netherlands	13	○
Italy	12	○
Malaysia	11	○
Cyprus	11	○
Bulgaria	11	○
Serbia and Montenegro	10	▼
Norway	9	▼
Saudi Arabia	9	▼
Scotland	8	▼
Macedonia, Republic of	8	▼
England	8	▼
Bahrain	8	▼
Palestinian Nat'l Auth.	7	▼
Egypt	5	▼
Armenia	5	▼
Indonesia	5	▼
Lebanon	5	▼
Iran, Islamic Republic of	4	▼
Botswana	4	▼
Philippines	3	▼
South Africa	2	▼
Chile	2	▼
Ghana	2	▼
Tunisia	1	▼
Morocco	0	▼
Moldova, Rep. of	0	▼

Country average vs. International average:

Higher	▲
Not different	○
Lower	▼

Metal crown: procedure to find volume of crown (continued)

Item Number: S032711

SCORING

Note: For full credit, responses must describe or diagram a procedure based on displacement and clearly identify how the volume of the crown is determined. Partial credit is given for procedures or diagrams that demonstrate knowledge of displacement without a complete description of the steps/measurements to be made. Responses may also implicitly refer to other materials not indicated in the diagram (e.g., ruler, marker, etc.). Because it is not totally clear from the diagram what the relative size of the crown, beaker, and tray are, credit is given for procedures that use any of these materials for displacement even if the actual procedure might not be completely successful.

Correct Response

- Describes or diagrams a procedure based on displacement of water using measured water level differences:
 - i) Adding water to the beaker (sink or tray) and marking the water level.
 - ii) Placing the crown in the beaker (sink or tray) and marking the new water level.
 - iii) Measuring the volume difference before/after adding the crown using the graduated cylinder
- Describes or diagrams a procedure based on displacement of water using measured overflow:
 - i) Filling the beaker (or tray) with water.
 - ii) Placing the crown in the beaker (or tray) and collecting the overflow.
 - iii) Measuring the volume of the overflow using the graduated cylinder
- Other fully correct.

Partially Correct Response

- Describes or diagrams a partial procedure that includes displacement of water but with inadequate or no description of the steps/measurements to determine the volume.

Examples: Put some water in the beaker and add the crown. Measure how much the level of water went up.

Add the crown to the beaker filled with water. See how much overflowed.
- Other partially correct.

Incorrect Response

- Mentions putting the crown in the beaker (sink or tray) of water with no explicit mention that the water level will rise/overflow and no or incorrect procedure given for measuring the volume.

Examples: Fill the beaker to the top with water and add the crown. You can get the volume that way.
- Other incorrect (including crossed out/erased, stray marks, illegible or off task).

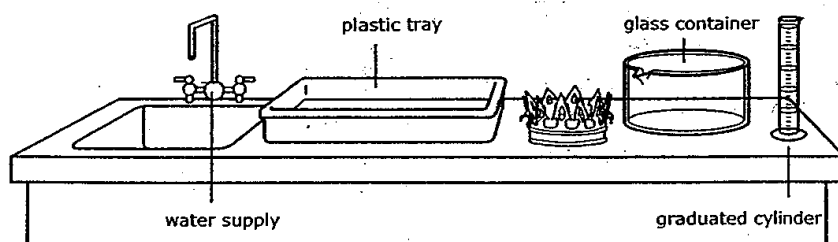
Metal crown: procedure to find volume of crown (continued)

Item Number: S032711

Student Responses

Correct Response:

The scientists then needed to find the volume of the crown in order to determine its density. The following equipment and materials were available for them to use.



Describe a procedure that the scientists could use to find the volume of the crown using some or all of the equipment and materials shown above. You may use diagrams to help explain your procedure.

- ① Fill glass container to the very rim with water
- ② Place graduated cylinder under the spout
- ③ Place the crown carefully into the glass container
- ④ Measure how much water fell into the cylinder
- ⑤ However much water spilled into the cylinder is the volume of the crown,
- ⑥ Convert mL into cm^3

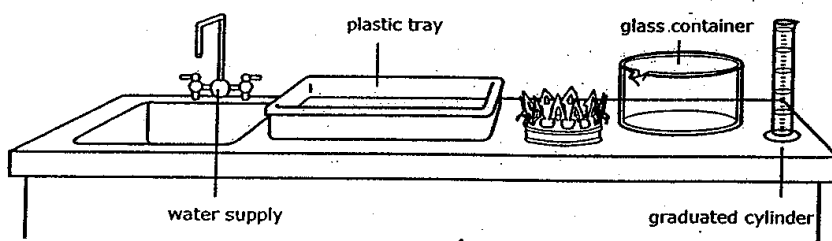
Metal crown: procedure to find volume of crown (continued)

Item Number: S032711

Student Responses (continued)

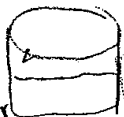
Partially Correct Response:

The scientists then needed to find the volume of the crown in order to determine its density. The following equipment and materials were available for them to use.

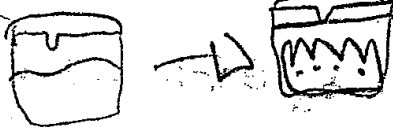


Describe a procedure that the scientists could use to find the volume of the crown using some or all of the equipment and materials shown above. You may use diagrams to help explain your procedure.

Put water in glass container → measure it



→ [crown] → [glass container with crown and water] → Measure how much higher it goes



Take away that number from the one without the crown & get the answer.

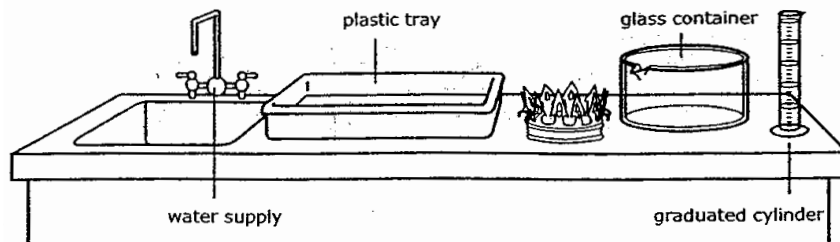
Metal crown: procedure to find volume of crown (continued)

Item Number: S032711

Student Responses (continued)

Incorrect Response:

The scientists then needed to find the volume of the crown in order to determine its density. The following equipment and materials were available for them to use.



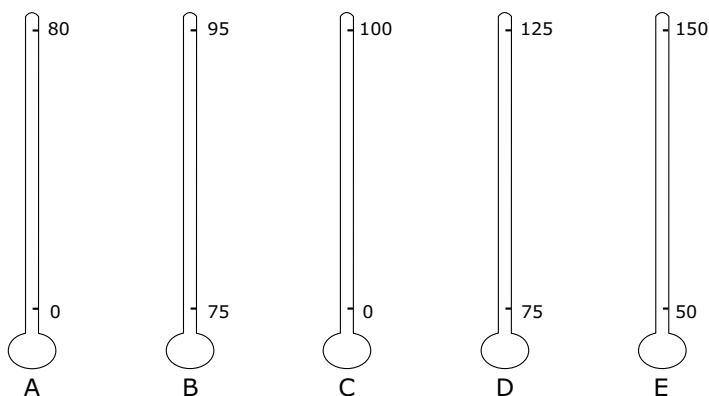
Describe a procedure that the scientists could use to find the volume of the crown using some or all of the equipment and materials shown above. You may use diagrams to help explain your procedure.

put the crown into the plastic tray then weigh it.

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Heat and Temperature	Reasoning and Analysis

Thermometer scale for boiling water

At different altitudes, the boiling point of water ranges from about 80° C to 100° C. Which of the Celsius thermometers shown below would give the most accurate measurement of the boiling point of water at different altitudes?



Thermometers

- (A) Thermometer A
- (B) Thermometer B
- (C) Thermometer C
- (D) Thermometer D
- (E) Thermometer E

Item Number: S022225

Correct Response:

D

Overall Percent Correct

Hong Kong, SAR	38	▲
Korea, Republic of	33	▲
Netherlands	33	▲
Slovak Republic	33	▲
Estonia	31	▲
Chinese Taipei	30	▲
Japan	29	▲
Belgium (Flemish)	27	▲
Israel	27	▲
Lithuania	26	▲
United States	26	▲
Singapore	25	▲
Hungary	24	▲
Russian Federation	23	▲
Sweden	22	○
Slovenia	22	○
New Zealand	22	○
Australia	22	○
Latvia	22	○
Palestinian Nat'l Auth.	21	○
Egypt	21	○
Jordan	20	○
England	20	○
International average	20	
Bulgaria	20	○
Scotland	19	○
Cyprus	17	○
Romania	16	▼
Italy	16	▼
Serbia and Montenegro	16	▼
Bahrain	16	▼
Norway	16	▼
Macedonia, Republic of	15	▼
South Africa	14	▼
Tunisia	13	▼
Moldova, Rep. of	13	▼
Philippines	13	▼
Lebanon	12	▼
Indonesia	11	▼
Iran, Islamic Republic of	10	▼
Armenia	9	▼
Chile	9	▼
Ghana	8	▼
Botswana	8	▼
Malaysia	6	▼
Morocco	0	▼
Saudi Arabia	0	▼

Country average vs. International average:

Higher	▲
Not different	○
Lower	▼

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Conceptual Understanding

Seeing person in a dark room

A person in a dark room looking through a window can clearly see a person outside in the daylight. But a person outside cannot see the person inside. Why does this happen?

- (A) There is not enough light being reflected off the person in the room.
 (B) Light rays cannot pass through a window twice.
 (C) Outside light does not pass through windows.
 (D) Sunlight is not as intense as other sources of light.

Item Number: S012004

Correct Response:

A

Overall Percent Correct

Singapore	87	▲
England	83	▲
Scotland	81	▲
New Zealand	81	▲
Sweden	80	▲
United States	79	▲
Lithuania	79	▲
Chinese Taipei	79	▲
Netherlands	79	▲
Korea, Republic of	78	▲
Australia	76	▲
Estonia	76	▲
Norway	75	▲
Israel	75	▲
Hong Kong, SAR	73	▲
Latvia	72	▲
Belgium (Flemish)	71	▲
Slovenia	70	▲
Romania	69	○
Hungary	69	○
Serbia and Montenegro	69	○
Indonesia	68	○
Italy	68	○
Moldova, Rep. of	68	○
Iran, Islamic Republic of	66	○
Bahrain	66	○
International average	66	
Philippines	66	○
Jordan	65	○
Cyprus	62	▼
Chile	61	▼
Japan	61	▼
Saudi Arabia	60	▼
Tunisia	60	▼
Macedonia, Republic of	59	▼
Slovak Republic	59	▼
Botswana	58	▼
Morocco	57	▼
Palestinian Nat'l Auth.	57	▼
Russian Federation	52	▼
Bulgaria	50	▼
Egypt	50	▼
Malaysia	47	▼
Ghana	44	▼
Armenia	42	▼
South Africa	42	▼
Lebanon	35	▼

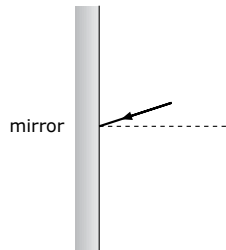
Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

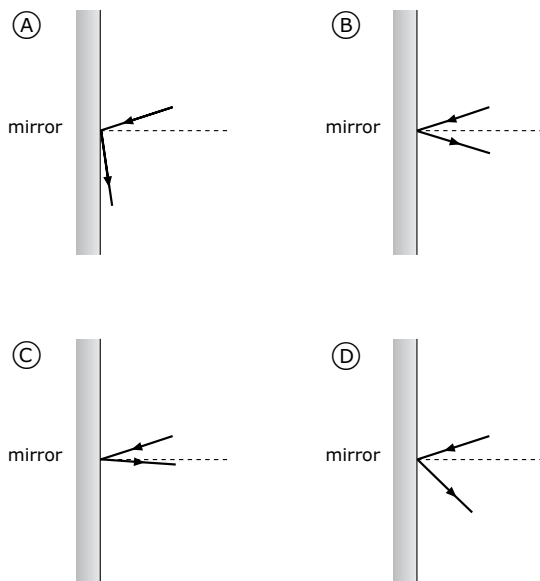
Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Conceptual Understanding

Angle of reflected light ray

A ray of light strikes a mirror as shown.



Which picture best shows the direction of the reflected light?



Item Number: S022058

Correct Response:

B

Overall Percent Correct

Estonia	83	▲
England	83	▲
Korea, Republic of	81	▲
Netherlands	81	▲
Japan	80	▲
Singapore	79	▲
Armenia	76	▲
New Zealand	76	▲
Chinese Taipei	75	▲
Latvia	74	▲
Malaysia	72	▲
Cyprus	72	▲
Sweden	71	▲
Lithuania	71	▲
Hong Kong, SAR	68	▲
Belgium (Flemish)	67	▲
Scotland	67	○
Australia	66	○
Bulgaria	66	○
Hungary	66	○
International average	63	
Slovenia	63	○
Serbia and Montenegro	62	○
Iran, Islamic Republic of	62	○
Slovak Republic	62	○
Israel	61	○
Russian Federation	61	○
Macedonia, Republic of	61	○
Indonesia	61	○
Palestinian Nat'l Auth.	60	○
Romania	59	○
United States	59	▼
Jordan	59	▼
Moldova, Rep. of	58	▼
Lebanon	57	▼
Norway	57	▼
Italy	57	▼
Egypt	54	▼
Bahrain	54	▼
Morocco	51	▼
Philippines	51	▼
Saudi Arabia	49	▼
Chile	45	▼
Tunisia	44	▼
Ghana	41	▼
Botswana	38	▼
South Africa	33	▼

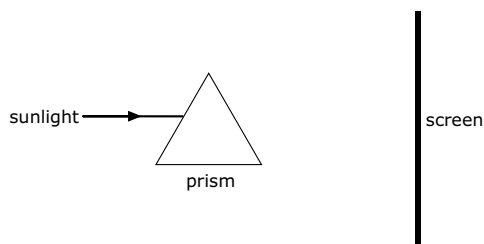
Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Conceptual Understanding

Sunlight through a glass prism

The diagram shows a ray of sunlight entering a glass prism.



Describe what will be seen on the screen.
(You may draw on the diagram to help explain your answer.)

Item Number: S032375

SCORING

Note: For full credit, responses must explicitly indicate that different colors are seen on the screen, either by textual description or by drawing on the diagram. A completely correct or complete sequence of colors is not required for full credit. Partial credit will be given for responses that show or describe refraction even if the appearance of the light beams on the screen is not fully described.

Correct Response

- Describes or draws the visible color spectrum.
Examples: A spectrum of seven colors which is red, orange, yellow, green, blue, indigo, violet.
- Refers to a spectrum, rainbow, colors, etc. (no color spectrum shown)
Examples: I will see many colors on it like the rainbow.
All the colors of the color spectrum.
There will be seven colors.
- Other fully correct.

Partially Correct Response

- Describes or draws multiple refracted rays but with no explicit connection to color.
Examples: There will be a lot of rays coming out the other side of the prism.
The light will spread out across that side of the prism and be seen on most of the screen.
- Describes or draws only the refraction (bending) of light beam (no mention of color dispersion).
Examples: The light inside the prism will bend.
The sunlight would go through at an angle.
- Other partially correct.

Incorrect Response

- Describes or draws a shadow or image of the prism (or similar).
Examples: The prism will make a shadow on the screen.
- Refers only to seeing sunlight or light on the screen. [No mention of color dispersion or refraction.]
Examples: Sunlight hitting the screen.
The screen will be bright because there is light falling on it.
- Other incorrect (including crossed out/erased, stray marks, illegible or off task).

Overall Percent Correct

Korea, Republic of	74	▲
Singapore	65	▲
Malaysia	53	▲
Hong Kong, SAR	49	▲
United States	49	▲
England	47	▲
Netherlands	45	▲
New Zealand	43	▲
Chinese Taipei	38	▲
Jordan	36	▲
Bahrain	34	▲
Armenia	33	▲
Palestinian Nat'l Auth.	33	▲
Lithuania	32	▲
Iran, Islamic Republic of	31	▲
Scotland	28	○
Sweden	25	○
Egypt	24	○
Hungary	24	○
Italy	24	○

International average

23

Australia	22	○
Estonia	20	○
Romania	18	▼
Israel	17	▼
Latvia	17	▼
Belgium (Flemish)	15	▼
Norway	15	▼
Slovenia	15	▼
Saudi Arabia	14	▼
Chile	11	▼
Russian Federation	11	▼
Philippines	10	▼
Japan	10	▼
Indonesia	9	▼
Lebanon	7	▼
Bulgaria	7	▼
Macedonia, Republic of	7	▼
Slovak Republic	6	▼
Botswana	5	▼
Cyprus	4	▼
South Africa	3	▼
Moldova, Rep. of	2	▼
Serbia and Montenegro	2	▼
Ghana	1	▼
Morocco	1	▼
Tunisia	0	▼

Country average vs. International average:

Higher	▲
Not different	○
Lower	▼

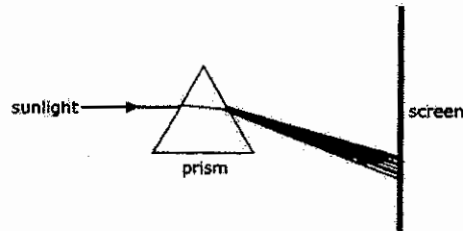
Sunlight through a glass prism (continued)

Item Number: S032375

Student Responses

Correct Response:

The diagram shows a ray of sunlight entering a glass prism.



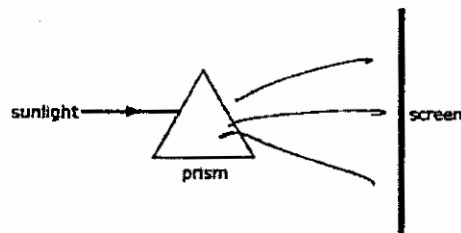
Describe what will be seen on the screen.

(You may draw on the diagram to help explain your answer.)

Seven different colours namely red, orange, yellow, green, blue, indigo and violet will be seen.

Partially Correct Response:

The diagram shows a ray of sunlight entering a glass prism.



Describe what will be seen on the screen.

(You may draw on the diagram to help explain your answer.)

You will see many different light rays

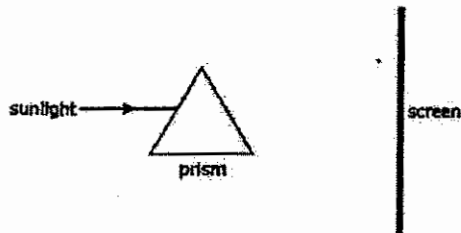
Sunlight through a glass prism (continued)

Item Number: S032375

Student Responses (continued)

Incorrect Response:

The diagram shows a ray of sunlight entering a glass prism.



Describe what will be seen on the screen.

(You may draw on the diagram to help explain your answer.)

There will be a
reflection of one side
of the prism

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Conceptual Understanding

Lightning seen before thunder heard

Mary was looking out her window on a stormy night. She saw lightning and then heard thunder a few seconds later.

Explain why she saw lightning before she heard thunder.

Overall Percent Correct

Singapore	88	▲
England	74	▲
Chinese Taipei	70	▲
Japan	65	▲
Hong Kong, SAR	62	▲
Lithuania	61	▲
Sweden	59	▲
Botswana	54	▲
Hungary	54	▲
Norway	54	▲
Estonia	53	▲
Latvia	52	▲
Netherlands	52	▲
Australia	51	▲
Korea, Republic of	47	▲
Malaysia	47	▲
Israel	46	○
United States	46	▲
Bahrain	45	○
Saudi Arabia	45	○
Romania	44	○
Slovenia	44	○
Bulgaria	43	○
New Zealand	43	○
Scotland	43	○
Belgium (Flemish)	42	○
International average	42	
Italy	41	○
Slovak Republic	41	○
Macedonia, Republic of	41	○
Egypt	40	○
Jordan	39	○
Serbia and Montenegro	37	▼
Russian Federation	36	▼
Cyprus	35	▼
Moldova, Rep. of	35	▼
Lebanon	32	▼
Palestinian Nat'l Auth.	31	▼
Armenia	26	▼
Chile	19	▼
Indonesia	19	▼
Iran, Islamic Republic of	15	▼
Philippines	13	▼
Morocco	12	▼
Tunisia	8	▼
South Africa	4	▼
Ghana	1	▼

Item Number: S032626

SCORING

Correct Response

- Refers to light traveling faster than sound (or similar).
Examples: *Speed of light is faster than speed of sound.*
Light travels quicker than sound.
It takes more time for sound to reach her than light.
- Other correct.

Incorrect Response

- Refers only to lightning being closer or thunder being further away (explicitly or implicitly).
Examples: *Thunder has a longer way to go.*
Thunder is striking from kilometers away.
- Refers to lightning occurring first, causing thunder, or similar.
[No explicit mention of the relative speed of light/sound to travel.]
Examples: *Lightning is so quick, thunder only happens afterward.*
The noise occurs later.
Thunder occurs from lightning.
Thunder is the echo of lightning.
- Other incorrect (including crossed out/erased, stray marks, illegible, or off task).

Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Lightning seen before thunder heard (continued)

Item Number: S032626

Student Responses

Correct Response:

Mary was looking out her window on a stormy night. She saw lightning and then heard thunder a few seconds later.

Explain why she saw lightning before she heard thunder.

Light travels faster than sound. So the lightning was moving faster than the thunder even though they were part of the same thing.

Incorrect Response:

Mary was looking out her window on a stormy night. She saw lightning and then heard thunder a few seconds later.

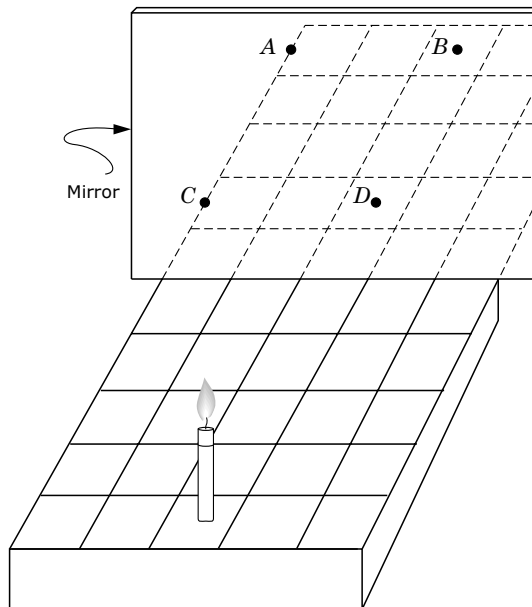
Explain why she saw lightning before she heard thunder.

She saw lightning first because the lightning is close.

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Reasoning and Analysis

Candle position reflected on grid

A candle is placed on a ruled grid in front of a mirror, as shown. At what point will the reflection of the candle appear to be?



- (A) Point A
 (B) Point B
 (C) Point C
 (D) Point D

Item Number: S012015

Correct Response:

B

Overall Percent Correct

Belgium (Flemish)	89	▲
Singapore	88	▲
Netherlands	87	▲
New Zealand	86	▲
England	86	▲
Scotland	83	▲
Hungary	80	▲
Hong Kong, SAR	80	▲
Estonia	80	▲
Australia	80	▲
Slovak Republic	77	▲
Korea, Republic of	77	▲
Chinese Taipei	77	▲
Japan	75	▲
Bahrain	74	▲
Malaysia	73	▲
United States	73	▲
Slovenia	72	▲
Russian Federation	71	▲
Norway	70	▲
Latvia	69	▲
Lithuania	68	▲
Cyprus	65	○
Armenia	65	○
International average	64	
Italy	64	○
Israel	63	○
Chile	63	○
Indonesia	60	▼
Sweden	60	▼
Serbia and Montenegro	59	▼
Moldova, Rep. of	56	▼
Palestinian Nat'l Auth.	55	▼
Bulgaria	54	▼
Romania	53	▼
Macedonia, Republic of	53	▼
Egypt	53	▼
Iran, Islamic Republic of	52	▼
Lebanon	51	▼
Saudi Arabia	48	▼
Morocco	46	▼
Jordan	45	▼
Tunisia	43	▼
Botswana	42	▼
Philippines	41	▼
Ghana	28	▼
South Africa	25	▼

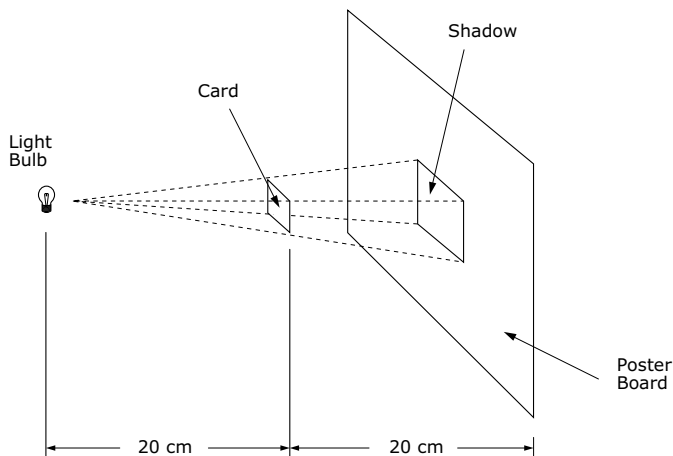
Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Reasoning and Analysis

Shadow size from distance diagram

A tiny light bulb is held 20 centimeters to the left of a square card, which is in turn held 20 centimeters to the left of a poster board, as shown. The shadow of the card on the poster board has a side of 10 centimeters.



If the poster board is moved 40 cm further to the right so that it is 80 cm from the light, what will be the new side of the card's shadow on the poster board?

- (A) 5 cm
 (B) 10 cm
 (C) 15 cm
 (D) 20 cm

Item Number: S012029

Correct Response:

D

Overall Percent Correct

Korea, Republic of	79	▲
Sweden	69	▲
Belgium (Flemish)	69	▲
Estonia	68	▲
Chinese Taipei	68	▲
Japan	67	▲
Russian Federation	67	▲
Singapore	66	▲
Netherlands	64	▲
Lithuania	63	○
Lebanon	63	○
Malaysia	63	▲
Scotland	63	○
Romania	62	○
Hungary	61	○
United States	61	○
Latvia	61	○
Hong Kong, SAR	61	○
Slovenia	61	○
Botswana	60	○
Armenia	60	○
Israel	60	○
England	60	○

International average 59

Italy	59	○
Moldova, Rep. of	59	○
Macedonia, Republic of	58	○
Australia	58	○
Serbia and Montenegro	58	○
Bahrain	58	○
New Zealand	57	○
Iran, Islamic Republic of	57	○
Philippines	57	○
Norway	57	○
Bulgaria	56	○
Morocco	56	○
Jordan	56	○
Palestinian Nat'l Auth.	56	▼
Cyprus	55	▼
Tunisia	53	▼
Slovak Republic	53	▼
South Africa	51	▼
Indonesia	50	▼
Saudi Arabia	49	▼
Egypt	48	▼
Chile	47	▼
Ghana	47	▼

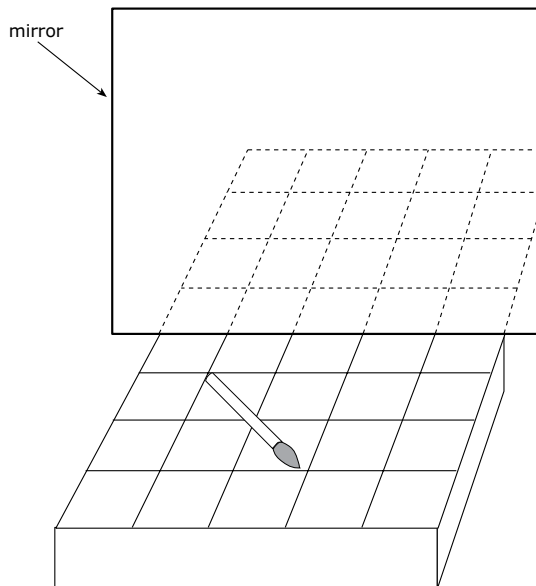
**Country average vs.
International average:**

Higher	▲
Not different	○
Lower	▼

Content Domain	Main Topic	Cognitive Domain
PHYSICS	Light	Reasoning and Analysis

Brush reflected in mirror at angle

The picture shows a paint brush that is lying on a shelf in front of a mirror. Draw a picture of the paint brush as you would see it in the mirror. Use the patterns of lines on the shelf to help you.



Item Number: S022279

Overall Percent Correct

New Zealand	75	▲
Netherlands	72	▲
Belgium (Flemish)	71	▲
England	71	▲
Scotland	70	▲
Estonia	67	▲
Japan	66	▲
Australia	61	▲
Hungary	61	▲
Hong Kong, SAR	60	▲
Singapore	59	▲
Latvia	59	▲
Lithuania	58	▲
Russian Federation	56	▲
Armenia	54	▲
Norway	53	▲
Slovenia	53	▲
Slovak Republic	52	▲
Chinese Taipei	52	▲
Sweden	51	▲
Malaysia	51	▲
Moldova, Rep. of	51	▲
United States	51	▲
Korea, Republic of	46	○
Serbia and Montenegro	45	○
Bahrain	44	○
International average	44	
Italy	42	○
Romania	41	○
Bulgaria	37	▼
Israel	36	▼
Chile	35	▼
Indonesia	35	▼
Macedonia, Republic of	35	▼
Iran, Islamic Republic of	32	▼
Cyprus	31	▼
Tunisia	26	▼
Philippines	24	▼
Morocco	23	▼
Egypt	22	▼
Palestinian Nat'l Auth.	22	▼
Saudi Arabia	21	▼
Lebanon	21	▼
Jordan	20	▼
Botswana	17	▼
South Africa	8	▼
Ghana	4	▼

Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Brush reflected in mirror at angle (continued)

Item Number: S022279

SCORING

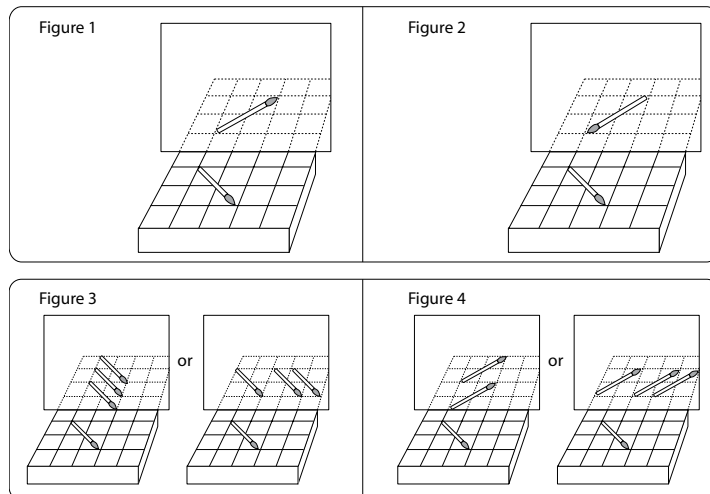
Note: A brush on the borderline of the correct squares should be accepted as correct. Credit is given for a brush in the correct squares even if the hairs are not clearly shown. Only if the hairs are clearly shown in the wrong direction is the answer incorrect.

Correct Response

- Correct placement: angle, grid position, and direction (hairs to the right). (See Figure 1.)

Incorrect Response

- Correct angle and placement, but image flipped with hairs clearly turned to the left. (See Figure 2.)
- Image parallel to original (hairs to the right or left). (See Figure 3; other rows/columns are possible).
- Correct angle but image translated (hairs to the right or left). (See Figure 4; other rows/columns are possible).
- Other incorrect (including crossed out/erased, stray marks, illegible, or off task).



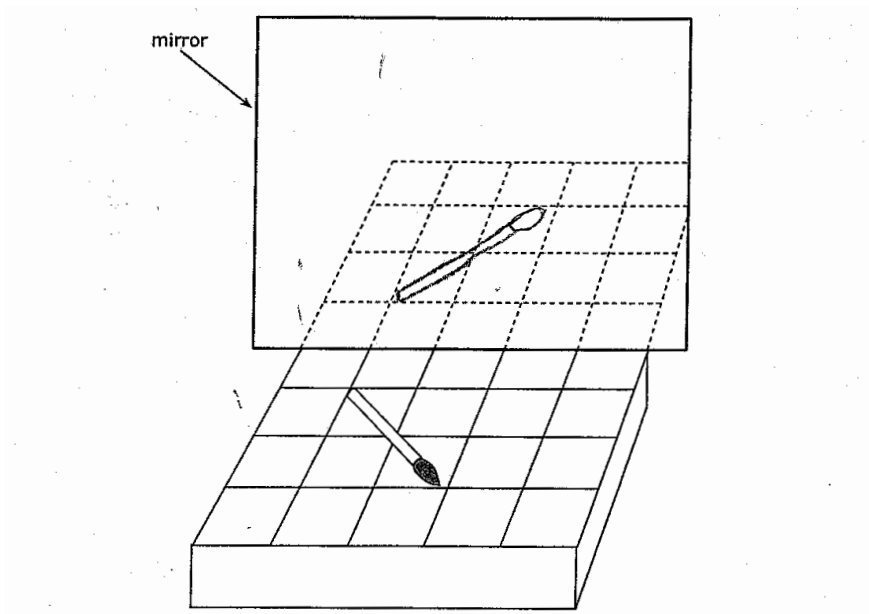
Brush reflected in mirror at angle (continued)

Item Number: S022279

Student Responses

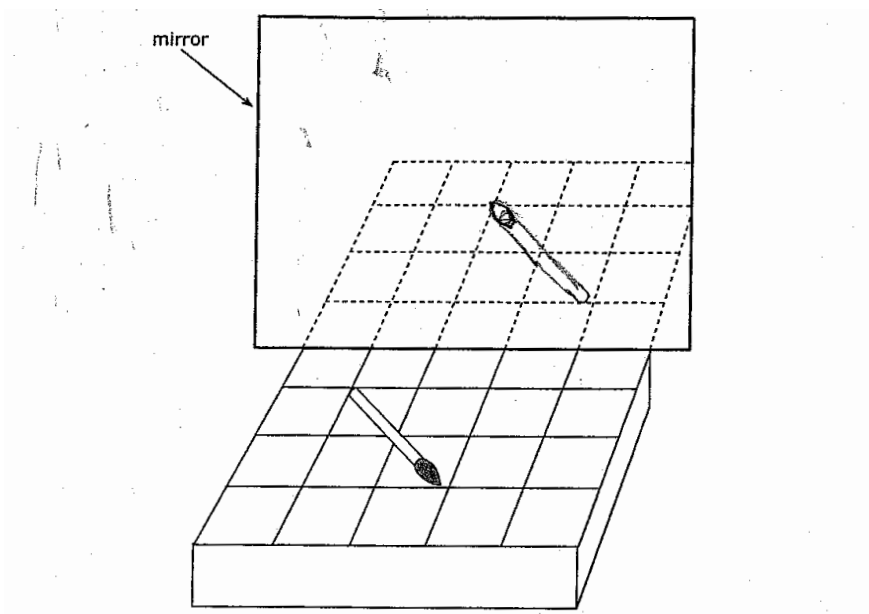
Correct Response:

The picture shows a paint brush that is lying on a shelf in front of a mirror. Draw a picture of the paint brush as you would see it in the mirror. Use the patterns of lines on the shelf to help you.



Incorrect Response:

The picture shows a paint brush that is lying on a shelf in front of a mirror. Draw a picture of the paint brush as you would see it in the mirror. Use the patterns of lines on the shelf to help you.



Content Domain	Main Topic	Cognitive Domain
PHYSICS	Physical States and Changes in Matter	Factual Knowledge

Wet towel dries in the sun

A wet towel will dry when it is left in the Sun. Which process occurs to make this happen?

- Ⓐ melting
- Ⓑ boiling
- Ⓒ condensation
- Ⓓ evaporation

Item Number: S032055

Correct Response:

D

Overall Percent Correct

Chinese Taipei	98	▲
Singapore	95	▲
Hungary	95	▲
Estonia	94	▲
Slovak Republic	94	▲
Hong Kong, SAR	94	▲
Japan	94	▲
Russian Federation	94	▲
Korea, Republic of	93	▲
Tunisia	91	▲
Lithuania	91	▲
Slovenia	90	▲
England	89	▲
Moldova, Rep. of	89	▲
New Zealand	88	▲
Australia	88	▲
Latvia	88	▲
Netherlands	88	▲
Malaysia	87	▲
Bulgaria	87	▲
Scotland	87	○
Jordan	86	○
Romania	86	○
Armenia	86	○
Belgium (Flemish)	85	○
United States	85	○
Israel	85	○
Serbia and Montenegro	85	○
Bahrain	84	○
Norway	84	○
International average	83	
Iran, Islamic Republic of	83	○
Morocco	83	○
Sweden	82	○
Saudi Arabia	82	○
Italy	81	○
Palestinian Nat'l Auth.	78	▼
Macedonia, Republic of	78	▼
Cyprus	77	▼
Indonesia	77	▼
Chile	76	▼
Lebanon	76	▼
Philippines	69	▼
Botswana	67	▼
Egypt	59	▼
South Africa	51	▼
Ghana	39	▼

Country average vs. International average:

Higher	▲
Not different	○
Lower	▼

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