

Content Domain	Main Topic	Cognitive Domain
EARTH SCIENCE	Earth's Structure and Physical Features	Conceptual Understanding

Rock carried farthest down the river

Lily found four rocks of the same material in a riverbed. They had different shapes and sizes.

Which rock has most likely been carried the farthest down the river?

The image shows four rocks in a riverbed, each with a circled letter label. Rock A is a large, dark, angular rock with a rough, pitted surface. Rock B is a small, smooth, light-colored, oval-shaped rock. Rock C is a medium-sized, smooth, light-colored, irregularly shaped rock. Rock D is a large, dark, angular rock with a rough, pitted surface, similar to rock A.

Overall Percent Correct

Hungary	86	▲
Lithuania	83	▲
Chinese Taipei	82	▲
England	80	▲
Netherlands	79	▲
Russian Federation	79	▲
Belgium (Flemish)	78	▲
Australia	77	▲
Latvia	76	▲
New Zealand	76	▲
United States	76	▲
Italy	75	▲
Moldova, Republic of	75	▲
Cyprus	73	○
Slovenia	71	○
Scotland	70	○
International average	69	
Hong Kong, SAR	68	○
Japan	64	▼
Norway	63	▼
Armenia	60	▼
Iran, Islamic Republic of	57	▼
Singapore	57	▼
Philippines	50	▼
Morocco	47	▼
Tunisia	24	▼

Country average vs. International average:	
Higher	▲
Not different	○
Lower	▼

Item Number: S031082

Correct Response:	B
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Content Domain	Main Topic	Cognitive Domain
EARTH SCIENCE	Earth's Structure and Physical Features	Factual Knowledge

Earth's surface

What covers most of the Earth's surface?

Ⓐ Water

Ⓑ Bare rock

Ⓒ Farm land

Ⓓ Cities and towns

Overall Percent Correct

United States	86	▲
Lithuania	83	▲
Russian Federation	82	▲
Singapore	82	▲
England	82	▲
Armenia	80	▲
Latvia	79	▲
Moldova, Republic of	79	▲
Australia	77	▲
Norway	77	▲
Scotland	77	▲
New Zealand	76	▲
Chinese Taipei	75	▲
Hungary	74	▲
Slovenia	72	○
Hong Kong, SAR	71	○
Italy	71	○
International average	68	
Belgium (Flemish)	65	○
Japan	60	▼
Netherlands	56	▼
Cyprus	54	▼
Philippines	53	▼
Iran, Islamic Republic of	45	▼
Morocco	30	▼
Tunisia	20	▼

Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Item Number: S011003

Correct Response:	A
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Content Domain	Main Topic	Cognitive Domain
EARTH SCIENCE	Earth's Structure and Physical Features	Factual Knowledge

Gas we need to breathe

What gas in the air do we need to breathe in order to live?

Ⓐ nitrogen

Ⓑ oxygen

Ⓒ carbon dioxide

Ⓓ hydrogen

Ⓔ water vapor

Overall Percent Correct

Hungary	95	▲
Hong Kong, SAR	94	▲
Netherlands	94	▲
Singapore	94	▲
Russian Federation	93	▲
Slovenia	93	▲
Belgium (Flemish)	93	▲
Australia	91	▲
Cyprus	91	▲
Lithuania	90	▲
United States	90	▲
Italy	89	▲
New Zealand	89	▲
England	89	▲
Scotland	88	▲
Chinese Taipei	85	○
Latvia	85	○
International average	84	
Norway	82	○
Iran, Islamic Republic of	78	▼
Moldova, Republic of	77	▼
Japan	75	▼
Armenia	72	▼
Morocco	62	▼
Tunisia	59	▼
Philippines	53	▼

Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Item Number: S011012

Correct Response:	B
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Content Domain	Main Topic	Cognitive Domain
EARTH SCIENCE	Earth's Structure and Physical Features	Factual Knowledge

Iron and aluminum

Large amounts of metals like iron and aluminum are found in

Ⓐ dead trees

Ⓑ water

Ⓒ animal bones

Ⓓ oil wells

Ⓔ rocks

Overall Percent Correct

Japan	69	▲
Hong Kong, SAR	65	▲
Italy	64	▲
Russian Federation	58	▲
Cyprus	53	▲
Hungary	51	▲
Singapore	51	▲
Chinese Taipei	48	○
Moldova, Republic of	48	○
United States	48	○
Netherlands	47	○
England	45	○
International average	45	
Armenia	44	○
Lithuania	44	○
New Zealand	44	○
Belgium (Flemish)	44	○
Australia	43	○
Iran, Islamic Republic of	43	○
Norway	42	○
Latvia	40	▼
Scotland	35	▼
Philippines	33	▼
Slovenia	33	▼
Morocco	28	▼
Tunisia	12	▼

Country average vs.
International average:

Higher	▲
Not different	○
Lower	▼

Item Number: S011013

Correct Response:	E
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Content Domain	Main Topic	Cognitive Domain
EARTH SCIENCE	Earth's Structure and Physical Features	Reasoning and Analysis

Terry's rocks

Terry tested four rocks to see how hard they are. He rubbed each of them against some hard steel for one minute. He drew pictures of what they looked like before he rubbed them and after he rubbed them.

Circle which of Terry's rocks is the hardest.

Before Test

After Test

(A) (B) (C) (D)

Overall Percent Correct

Netherlands	85	▲
England	85	▲
United States	84	▲
Hong Kong, SAR	83	▲
Japan	80	▲
Singapore	80	▲
Chinese Taipei	78	▲
Belgium (Flemish)	78	▲
Latvia	77	▲
Slovenia	74	▲
Russian Federation	72	▲
Scotland	72	▲
Australia	71	▲
Italy	70	▲
New Zealand	70	▲
Norway	68	○
International average	66	
Hungary	65	○
Cyprus	64	○
Moldova, Republic of	61	○
Lithuania	59	▼
Armenia	47	▼
Iran, Islamic Republic of	38	▼
Philippines	36	▼
Morocco	26	▼
Tunisia	20	▼

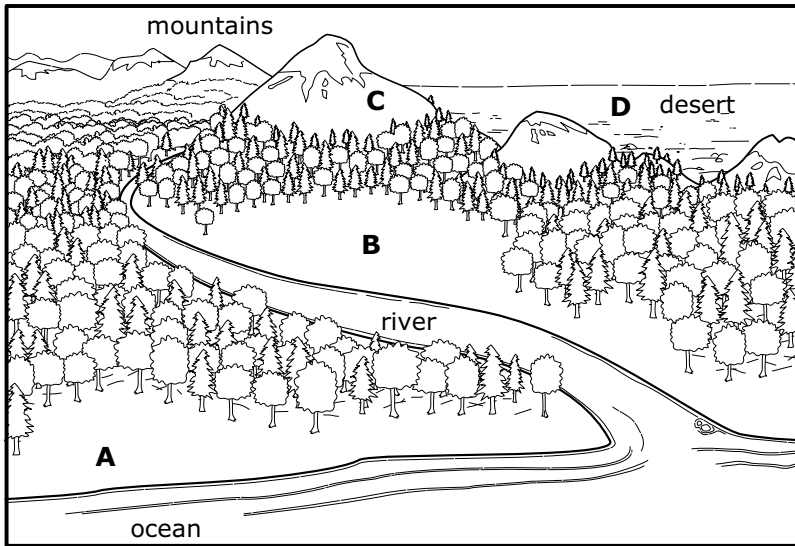
Country average vs. International average:	
Higher	▲
Not different	○
Lower	▼

Item Number: S011023

Correct Response:	D
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Content Domain	Main Topic	Cognitive Domain
EARTH SCIENCE	Earth's Structure and Physical Features	Reasoning and Analysis

Best location to grow crops



Look at the picture above. Where is the best location to grow crops?

- (A) Location A
- (B) Location B
- (C) Location C
- (D) Location D

Overall Percent Correct

Japan	75	▲
Hong Kong, SAR	70	▲
Latvia	70	▲
United States	70	▲
Hungary	69	▲
Lithuania	69	▲
Netherlands	69	▲
England	69	▲
Italy	68	▲
Scotland	68	▲
Chinese Taipei	67	▲
Australia	66	▲
New Zealand	63	▲
Norway	63	▲
Russian Federation	63	▲
Singapore	62	▲
Cyprus	59	○
International average	57	
Slovenia	56	○
Moldova, Republic of	54	○
Belgium (Flemish)	44	▼
Armenia	34	▼
Iran, Islamic Republic of	32	▼
Morocco	27	▼
Philippines	24	▼
Tunisia	22	▼

Country average vs. International average:

- Higher ▲
- Not different ○
- Lower ▼

Item Number: S031379

Correct Response:	B
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