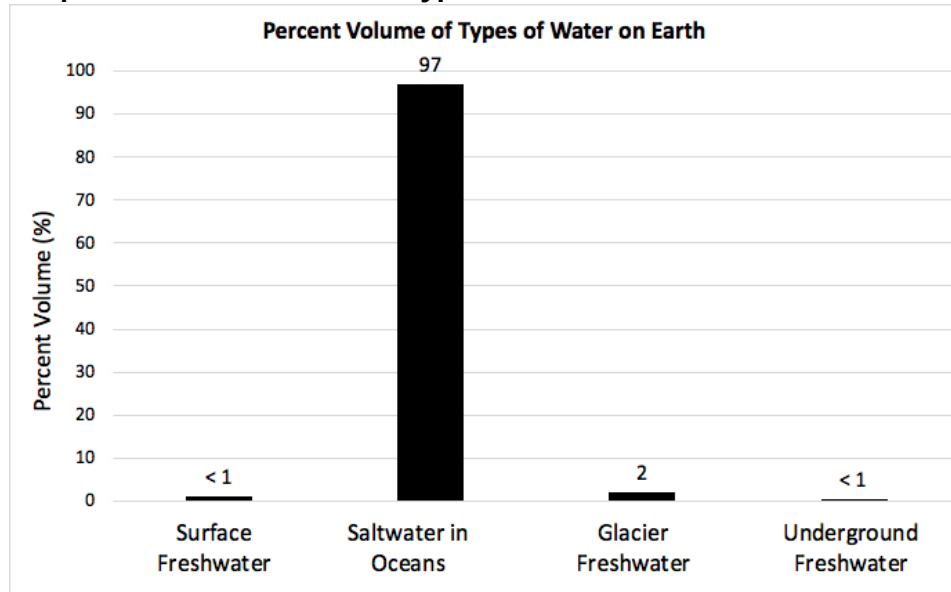


ISA 2023 Practice Exam Extended Response Rubrics

Grade 5

When looking at satellite photos of Earth from space, students observe that most of Earth is covered in water. The teacher provided the following graph.

Graph 1. Percent Volume of Types of Water on Earth



Using Graph 1, make a claim for whether salt or fresh water makes up most of the water on Earth. Write your response. Use evidence and reasoning to support your claim.

Scoring Rubric

1 Point: Provides a statement that indicates Saltwater makes up most of the water on Earth.

1 Point: References or cites data from Graph 1 to indicate saltwater in oceans make up the greatest percent volume of water on Earth, or there is more saltwater than any other type water on Earth.

1 Point: Reasons or demonstrates an understanding that most water on Earth is ocean water, all ocean water is saltwater, therefore most water on Earth is saltwater (should indicate most water on Earth is in the ocean).

Grade 8

Figure 1 shows the long, slender beak of the ruby-throated hummingbird. Figure 2 shows the feeding tube of a bee. The hummingbirds and bees feed on nectar from many types of flowers. The structures of flowers affect how easy it is for different pollinators to feed on them. Table 1 lists some types of flowers located in an area with hummingbirds and bees.





Figure 1. Ruby-throated Hummingbird Beak



Figure 2. Bee Feeding Tube



Table 1. List of Area Flowering Plants

Plant	Flower	Depth of Nectary (cm)
A		Less than 1
B		6
C		Less than 1
D		8

Using the information, what two plant populations will be pollinated **most often** by **bees** and why? Use evidence and reasoning to support your answer.

Scoring Rubric

- 1 Point: States plants/flowers A **and** C are the correct answers.
- 1 Point: Use data from Table 1 to show the depth of the nectaries is less than 1 cm for plants A **and** C or greater than 1 cm for B **and** D.
- 1 Point: Must reason that because the nectary of A and C are short enough for the bees feeding tube to easily reach the nectar which results in more pollination **or** B and D are too deep for the bees feeding tube to easily reach the nectar which results in less pollination.

Grade 11

An organization has been given \$8000 to help remove carp from a local waterway using nets. A net is gear used to remove fish from the water. Table 1 shows the estimated weekly catch of three different types of nets.

Table 1. Net Comparisons

Net	Individual Cost (\$)	Estimated Weekly Catch		
		Total Fish	Bigheaded Carp	Silver Carp
A	10,000	354	51	131
B	1,000	632	12	4
C	250	96	16	3

Using Table 1, which net removes the **most** carp with a budget of \$8000. Use evidence and reasoning to support your claim.

Scoring Rubric

1 Point: Answers Net C will catch the most carp within the budget.

1 Point: Give evidence to show Net C removes the **most** carp within budget.

1 Point: Give evidence/reasoning that Net A will be overbudget or cost too much **AND** Net B catches fewer invasive fish or too many native fish.