

⇒ HOW TO MAXIMIZE POINTS ON AN APES FRQ ⇐

RULE #1: Answer The Prompt!!!

Make sure you are answering the question that is being asked.

FRQ Task Verbs

| | | |
|----------------------------|---|---|
| Identify | Indicate or provide information about a specified topic, without elaboration or explanation. | Identify a property of soil. <i>Texture is a property of soil.</i> |
| Describe: | Provide relevant characteristics of a specified topic. Identify + (which/because/such as/thus, etc.) | Describe a property of soil. <i>A property of soil is texture which is determined by the amount of sand, silt, and clay.</i> |
| Explain: | Provide information about how or why a relationship, process, pattern, position, situation, or outcome occurs, using evidence and/or reasoning to support or qualify a claim. | Explain how a specific property of soil determines the health of soil. <i>A property of soil is texture. The more sand in the soil, the more permeable the soil is. If the soil is too permeable, it cannot hold enough water to support plant growth.</i> |
| Propose a solution: | Provide a proposed solution to a problem based on evidence or knowledge. | Propose a solution to increase the fertility of soil. <i>The use of compost as organic fertilizer would add more nutrients to soil.</i> |
| Make a claim: | Make an assertion that is based on evidence or knowledge. | Make a claim for how the addition of compost would affect the fertility of soil. <i>The addition of compost would increase the fertility of soil.</i> |
| Justify: | Provide evidence to support, qualify, or defend a claim and/or provide reasoning to explain how evidence supports or qualifies the claim. | Justify your claim for how the addition of compost would affect the fertility of soil. <i>Compost contains decomposing biomass which would add plant nutrients such as nitrogen and phosphorus into the soil. The addition of these plant nutrients would increase soil fertility and allow for more plant growth.</i> |

Analyzing Data

Identify a value: do NOT give a range. Choose a point. If the value is between 70 - 75, choose a number. Ex: 73.

Describe trend: Directional (↑, ↓, ↑ then ↓). As ____ (↑ or ↓), then ____ (↑ or ↓).

Experimental Design

Don't Use These Phrases!!! Too vague..be more specific!!!

| | | |
|---|--|---|
| Identify the independent variable. | the factor that the scientist changes | <ul style="list-style-type: none"> Natural • Healthier for the environment • Eco friendly • Good for the environment • It will balance everything • It will throw off the balance • Hurt the environment • Harm the environment • Bad for the environment • Causes pollution • Harm human health • Make it illegal • Change/affect (how? Increase? decrease?) |
| Identify the dependent variable. | what you are measuring/observing | |
| Describe the control. | factor that you purposely don't change to act as a comparison (ex: room temperature water, neutral pH, etc.) | |
| State a scientific question/ State a hypothesis. | Question: How will IV affect DV? Hypothesis: IV (↑ or ↓) will cause DV to (↑ or ↓). | |
| | | Other Words to Know: |
| | | Environmental/ecological: animals, plants, soil, air, ***NOT PEOPLE*** |
| | | Economic: money, jobs |
| | | Societal/social: people, cities, crops |