Core Skills Analysis

Geography

- The student has learned about the geographical location of shield volcanoes and their distinctive characteristics compared to other volcano types.
- The activity helped the student understand how the shape of shield volcanoes is formed due to the nature of the lava flow, which is more fluid than that of other volcano types.
- By examining the location of the shled volcano, the student likely explored the relationship between tectonic plate movement and volcanic activity.
- The student gained insight into the global distribution of shield volcanoes, recognizing that they are typically found around hotspots and rift zones.

Science

- The student explored the geological processes involved in the formation of shield volcanoes, focusing on the role of magma composition.
- Through this activity, the student learned about the eruption style of shield volcanoes, which often results in gentler and more widespread lava flows.
- The activity may have introduced concepts of volcanic hazards, particularly how shield volcanoes can create large lava flows that affect surrounding areas.
- The student likely gained skills in observation and data collection by identifying and categorizing different geological formations related to shield volcanoes.

Environmental Studies

- The student examined the environmental impact of shield volcanoes, including how they contribute to soil fertility in regions where they erupt.
- The activity encouraged the student to think about the biodiversity surrounding shield volcanoes, examining how different ecosystems adapt to volcanic landscapes.
- The student may have discussed the impact of volcanic eruptions on climate and weather patterns.
- By identifying regions with shield volcanoes, the student explored human interactions with volcanic landscapes and their implications for community planning and safety.

Tips

To enhance the learning experience further, consider integrating interactive maps or virtual tours that allow the student to explore shield volcanoes around the world. Incorporating hands-on activities such as creating a model of a shield volcano can solidify their understanding of its structure and function. Encourage the student to conduct a simple experiment demonstrating how fluidity affects the flow of materials by using different liquids. Possible activities include exploring real-life case studies of specific shield volcanoes, examining their impact on nearby ecosystems, and discussing volcanic safety measures.

Book Recommendations

- Earthquakes and Volcanoes by Kathy Wollard: An engaging introduction to earthquakes and volcanoes, offering fascinating facts and simple experiments.
- Volcanoes: A Kid's Guide by Catherine A. Welch: This book provides a fun overview of volcanoes, perfect for young explorers interested in the mysteries of natural disasters.
- The Magic School Bus: Volcanoes by Joanna Cole: Join Ms. Frizzle and her class on a field trip to

learn all about volcanoes and how they work!

Learning Standards

- NGSS MS-ESS2-2: Construct an explanation based on evidence for how geoscience processes have changed Earth's surface.
- NGSS MS-ESS3-2: Analyze and interpret data on the interrelationships among Earth systems.
- CCSS.ELA-LITERACY.RI.3.7: Use information gained from illustrations (e.g., maps) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).