



## POSTVISIT STUDENT SURVEY GRADES 5-6

### *TEACHER INFO & ANSWERS*

The student survey that appears on page 3 of this document is intended for use *after* your class has visited Sterling Hill and, in conjunction with the previsit survey, will allow you to assess how much your students learned during their class trip. The surveys, the class trip to Sterling Hill, and the pre- and post-visit activities are cross-curricular by design and are meant to address various aspects of earth science, social studies, and technology.

**Standards Addressed:** See previsit survey for list and explanation.

**Time Required for Survey:** 10-12 minutes

**Materials Needed:** One copy of the survey sheet (p. 3) for each student.

#### **Answers:**

#### **A. Name three to five things you saw inside the mine.**

Tools: Shovels, picks, rock drills, hammers, dynamite, ore cars, drill hoses, rock bolts, self-rescuer, cap lamp, etc.

Other: Mine shaft, tunnels, ladderways, safety exit, water pipes, electrical lines, portable toilets, medical-supply box, etc.

#### **B. What types of dangers did miners face in the Sterling Hill mine?**

Cave-ins, explosions, poisonous gases, fire, accidents with equipment, falls

#### **C. What mineral resource was most recently mined at the Sterling Hill Mine?**

Zinc ore (to produce zinc metal and zinc oxide as raw materials for hundreds of other products).

#### **What is this mineral resource used for today?**

Medicines (anti-itch creams, diaper-rash lotions), pennies, batteries, coatings on steel objects to prevent rust (galvanizing), tires (to give strength to the rubber), vitamins (zinc is essential to health), die-cast parts, opacifier in paints (so one coat suffices), etc.

#### **D. In the Zobel Exhibit Hall, name three things you observed that were used by the miners as they came in to work, and as they finished the day to return to their homes.**

Lockers, baskets (for drying clothes), showers, waterproof boots, clothes, towels

**E. Describe the properties of the rock sample that you received when you were in the Rainbow Room.**

Answers will vary, but students should mention that the specimen fluoresced (glowed) when held under ultraviolet light and appears much different than it does in daylight. Students might also mention that the specimen consists of different-colored minerals, and some may have noticed that it is heavier than normal rocks of equivalent size.

**F. On the back of this sheet, draw a picture of the landform and the entrance to the mine that you observed at Sterling Hill.**

Students should draw a hillslope with a set of doors (the adit portal) that lead into the mine.



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Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Date: \_\_\_\_\_

The questions below will help you consider some things you have learned about mining from your visit to Sterling Hill.

A. Name three to five things you saw inside the mine.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

B. What types of dangers did miners face in the Sterling Hill mine?

C. What mineral resource was most recently mined at the Sterling Hill Mine?

What is this mineral resource used for today?

D. In the Zobel Exhibit Hall, name three things you observed that were used by the miners as they came in to work, and as they finished the day to return to their homes.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

C. Describe the properties of the rock sample that you received when you were in the Rainbow Room.

E. On the back of this sheet, draw a picture of the landform and the entrance to the mine that you observed at Sterling Hill.