Curriculum Connections

- Health: Invite the school nurse or dermatologist to talk with students about the importance of using sunscreen to protect their skin from ultra-violet light.

Assessment

Ultra-violet beads offer third and fourth graders a fine opportunity to develop a scientific investigation or fair test. Ask your students to design their own test to show how the beads respond under different conditions.

The following list outlines some useful expectations on how to assess such investigations.

Exemplary:

- Students plan controlled investigations of predictions with a rationale based on scientific thinking.
- Students repeat procedures to confirm observations.
- Students apply measurement to represent their ideas.
- Students select appropriate charts and graphs to record and then interpret their findings.
- Students make conclusions that relate their findings to scientific thinking and propose further questions for investigation.

Emerging

- Students make predictions that guide the formation of fair testing procedures.
- Students defend their procedures and rationale for selecting them.
- Students carry out fair tests, knowing why they are fair.
- Students select and make appropriate measurements.
- Students complete a chart or graph to record and help interpret their findings.
- Students draw conclusions and attempt to relate their findings to scientific thinking.

Formative

- Students describe what they expect to happen when something is changed and supporting that idea with some scientific thinking.
- Students use suitable equipment to make and record adequate and relevant observations.
- Students record what they find and compare it to what they expected.
- Students make appropriate measurements.