



Third Grade  
Formative Assessment  
The Physical Properties of Matter Mobile

Instructional activity: Student groups will create mobiles that illustrate the physical properties of matter.

Teacher Directions:

1. The teacher will engage the students in investigations whereby the students will journal and/or complete a thinking map about the physical properties of matter including temperature, magnetism, hardness, mass, weight, and size (linear and volumetric).
2. The teacher will provide the students with measuring tools for quantitative data collections that include safety goggles, clocks, computers, thermometers, hand lenses, meter sticks, rulers, and balances.
3. The teacher will explain the requirements for the project as follows:
  - Students will be placed into groups of three. Each member in the group chooses to study a solid, a liquid, or a gas and selects a real object to analyze for the chosen state of matter.
  - Each group is to produce a mobile that illustrates the three states of matter, has an illustration of a representation of an actual object and lists the qualitative attributes and quantitative attributes as measured by tools. Some qualitative attributes are listed in #1.

Student Directions:

1. Students will participate in the investigations, demonstrate their understanding of physical properties of matter and record their data.
2. Students will work in groups to produce a mobile about matter that includes the criteria listed in the teacher direction #3.
3. Student groups will present their findings to the class.

TEKS focus: Content, Skills, Process:

- 3.4** The student knows how to use a variety of tools and methods to conduct science inquiry.
- 3.7** The student knows that matter has physical properties and can be identified as solid, liquid, and gas.