METRIC M&Ms

Directions: On a sheet of paper, answer the following questions:

1. How could we demonstrate a kilo- portion of M&Ms using the hecto- bags?
2. How many base units are in a deka-?
3. Give an example of something you'd want to have a milli- of.
4. Give an example of something you'd like to have a hecto- of.
5. Contrast a centigram to a hectogram.
6. Think about our money system, with one dollar representing a base unit. In the metric system, which prefix is equivalent to a DIME? Explain your answer.
7. Would you rather have a base unit M&M or a centi- M&M? Explain your answer.

METRIC M&Ms

ANSWER KEY

1. How could we demonstrate a kilo- portion of M&Ms using the hecto- bags?

   We could put ten hecto- bags together, which would give us 1,000 M&Ms (a kilo- is 1,000).

2. How many base units are in a deka-?

   TEN

3. Give an example of something you'd want to have a milli- of.

   Students' answers should indicate wanting something that is undesirable, as a milli- is something extremely small.

4. Give an example of something you'd like to have a hecto- of.

   Students' answers should indicate wanting something that is highly desirable, as a hecto- is relatively large.

5. Contrast a centigram to a hectogram.

   When something is broken up into 100 pieces, a centigram is one of those pieces. It's very small. A hectogram is 100 "whole things." It's big.

6. Think about our money system, with one dollar representing a base unit. In the metric system, which prefix is equivalent to a DIME? Explain your answer.

   A deci- is equal to one-tenth, and a dime is one-tenth of a dollar. It takes ten dimes to equal one dollar, and ten deci- to equal one base unit.

7. Would you rather have a base unit M&M or a centi- unit? Explain your answer.

   Students should prefer a base unit because it is one hundred times more than a centi- unit.

Examples of what to write on the construction paper prefix sheets.

Mount them in front of the room so students can refer to them during the activity *Metric M&Ms.*

KILO-

1,000 base units

HECTO-

100 base units

DEKA-

10 base units

BASE UNIT

1

Remind students that 1/10, (.1) is one-tenTH. Tell students to stick-their-tongue-out at everything behind the decimal.

DECI-
.1
1/10
one-tenth

CENTI-
.01
1/100
one-hundredth

MILLI-
.001
1/1000
one-thousandth

