mystery science

Name: _____
Date: _____

How can you unlock a door using a magnet?

Lesson Assessment

1. For each example, circle the property or properties of magnets being used. (There may be examples where more than one property is being used.)

Attracting: Magnets attract other magnets and some metals.
Repelling: Magnets repel other magnets.
Working at a distance: Magnets don't have to be touching to push and pull each other.

Example	Which property(ies) of magnets is being used?		
a. Holding things on the refrigerator with magnets	Attracting	Repelling	Working at a distance
b. Cow magnets picking up metal in a cow's stomach	Attracting	Repelling	Working at a distance
c. Magnetic train ("MagLev" train) using magnets instead of wheels	Attracting	Repelling	Working at a distance
d . Magnetic clasp on a purse or bag	Attracting	Repelling	Working at a distance
e. "Magic" trick: moving a magnet with a magnet under the table	Attracting	Repelling	Working at a distance
f. Picking up cars & other metal pieces at the junkyard	Attracting	Repelling	Working at a distance

Bonus: In the space below, come up with your own example. Give the property of magnets it uses.

2. Reflect on your magnetic lock design:

A. What problem were you trying to solve?

B. Draw and label your lock design.

C. Choose one property of magnets:

attracting repelling working at a distance

How was this property of magnets useful in your design?