

Handout

Fill in the blank using the word bank:

**increase cold particles less temperature
moving energy water faster more**

1. Everything is made of _____.
2. Particles are always _____.
3. An increase in _____ makes particles move _____.
4. An increase in _____ is the same thing as an _____ in energy.
5. The particles in hot water have _____ energy than _____ water.
6. The particles in ice move _____ than particles in _____.
7. Draw what happens to two balloons that start out as the same size:
 - a) One is put into liquid Nitrogen
 - b) One is put in a hot car.
 - c) Draw 6 particles into each balloon.

| Balloon in liquid Nitrogen | Balloon in a hot car |
|----------------------------|----------------------|
| | |

8. Circle the answer to the following questions about the balloons.

| | | | |
|--------------------------------------|--------------|-------------|------|
| a) Which balloon is the biggest? | Cold Balloon | Hot Balloon | Same |
| b) Which particles have less energy? | Cold Balloon | Hot Balloon | Same |
| c) Which balloon is heaviest? | Cold Balloon | Hot Balloon | Same |