Movement of Energy

Name:

Period:

As you examine the pictures, fill in the blanks below.

boil energy hotter

The flame is making the water in the kettle _____ .

The flame is adding _____ to the water.

As more energy is added to the water in the tea kettle, the water will soon begin to _____ .

---

energy less steam

As the water boils, _____ comes out of the kettle.

The longer the water boils, the _____ water remains.

So, add enough _____ to water, and water changes into steam.

---

drop energy flame hotter steam

Think about what happens when you want to cook some vegetables. They are cut up and dropped in boiling water. The _____ from the water goes into the vegetables, making them _____ and cooking them. The energy from the _____ under the pot keeps the water boiling. Some of the water escapes as _____ , causing the water level in the pot to _____ .

---

boil energy hot steam swim

You now know that adding enough _____ to a liquid like water will soon make it _____ . This means that the water has gotten really _____ , and is changing into _____. If you see a boiling liquid, like this lake in Yellowstone Park heated by volcanic activity, you definitely do not want to take a _____ !

turn over for more

Practice: 10 points, Assessment: 6 points

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Movement of Energy

Name:

Period:

added frozen lost rain snow solid

Now let's look at what happens to water when energy is removed. As temperatures get colder, _____ (water) will turn into _____ (ice). Energy was _____ from the water, so the water changed from a liquid to a _____. Until enough energy is _____ to the ice, the water will remain _____ .

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energy liquid solid sunlight

As winter ends and spring begins, energy from _____ begins to warm the air. This _____ is added to the ice and snow, and soon the _____ water changes into _____ again.

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bacteria freezer remove spoil

Removing energy is also important for preserving food. The _____ in your garage or in your refrigerator has a motor in it that moves chemicals around that _____ heat energy. The colder your food is (especially meat), the harder it is for the meat to _____ . Keeping meat frozen prevents _____ from making the meat rotten.

SUMMARY

Adding energy makes things _____ . Removing energy makes things _____ .

To make a solid like ice change into a liquid like water, you must _____ energy.

To make a liquid like water change into a solid like ice, you must _____ energy.

To make a liquid like water change into a gas like steam, you must _____ energy.

To make a gas like steam change into a liquid like water, you must _____ energy.

Practice: 10 points, Assessment: 6 points

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