

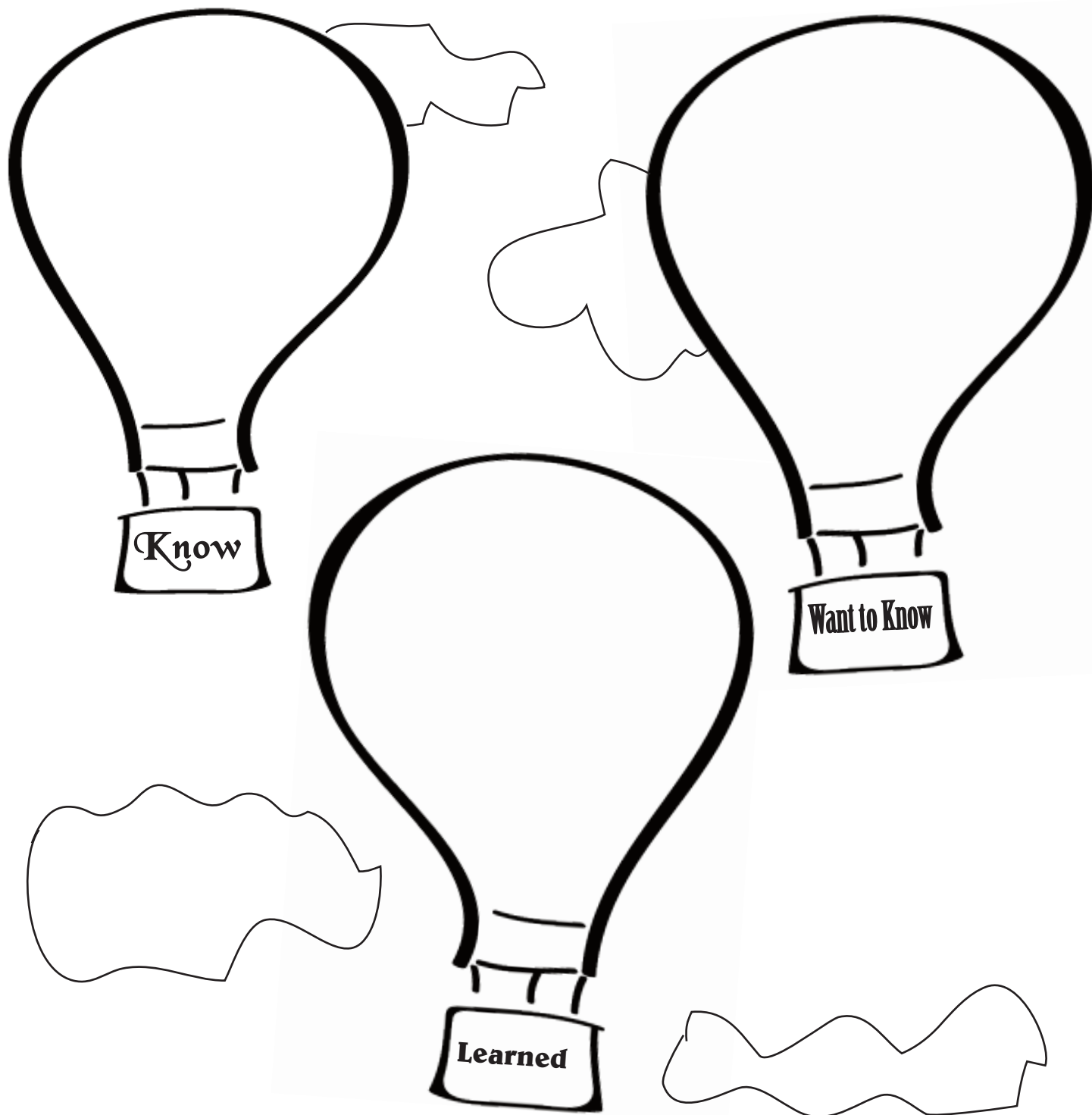
# K-W-L Chart

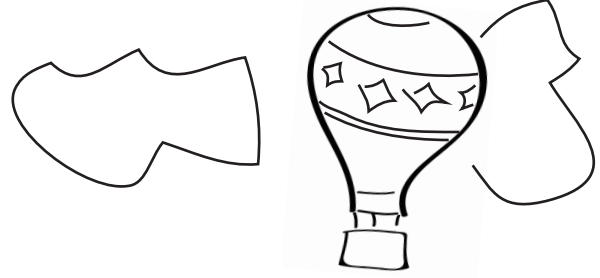
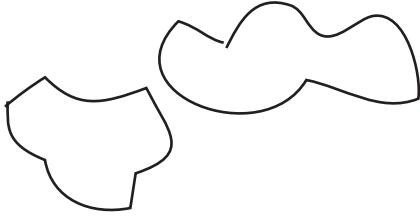
Name: \_\_\_\_\_ Date: \_\_\_\_\_

Class: \_\_\_\_\_

**Activity 1—KWL:** During the Age of Enlightenment, hot air balloons were invented. Fill out what you know in the balloon marked “Know” below and what you want to know in the balloon marked “Want to Know.” Then research and read about hot air balloons. Find the answers to your questions, confirm that what you thought you knew is correct with a check and note if it’s not with an X, and note what new information you learned.

---





**Activity 2—Comparing Literature:** Read plot summaries of both *Around the World in Eighty Days* and *The Twenty-One Balloons*. Have students compare these stories, keeping these questions in mind:

1. What is the time period?
2. What technology is used?
3. What is the premise of the story?
4. What do the stories have in common (think about characters, plot, and setting)?
5. What do the two stories handle differently (think about characters, plot, and setting)?

**Activity 3—How Hot Air Balloons Work:** Have students create a poster that visualizes how hot air balloons work. Students should note the various air pressures at work as well as the different parts of a hot air balloon. Be sure students understand that their poster should explain hot air balloons and not hydrogen balloons.

**Activity 4—Make Your Own Hot Air Balloon:** As homework, have students research instructions to make their own miniature hot air balloons. Stress that they should not conduct the experiments at home, just bring in a few examples of experiments they think may work. Then, as a class, pick the experiments from all the class's submissions that you want to try. The class should pick one experiment they think will definitely work, one they think will definitely not work, and one they are not sure about. Before doing the experiments, the class should note why they think each experiment will or will not work. Then, in class and under supervision, carry out the experiments the class has picked and make a hot air balloon. Afterwards, revisit the students' thoughts about each experiment to see if they were correct. When carrying out all experiments, be sure to go over the importance of fire safety!

**Activity 5—The Age of Enlightenment:** Hot air balloons are one of many inventions and scientific advancements that came out during the Age of Enlightenment. Have students write a short explanatory essay on the Age of Enlightenment (When was it? What did it involve?). Then have them note at least 5 other important inventions or scientific advancements that came about during this time—they should also note one not-so-important but fun invention! Students should include pictures where available, and should include the following information about each invention or advancement:

1. Who is it credited to? Were there competitors?
2. What problem did it hope to solve?
3. When was it invented or discovered?
4. How much did it change society and how?
5. Is this invention still around in some form today? If so, explain.