BRIDGES

NAMES: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Visit the following website and answer the questions on this sheet:
<http://www.pbs.org/wgbh/buildingbig/bridge/basics.html>

**Bridge Basics**
1. Name the four most common types of bridges

2. Name one use for each bridge type

**Play the “Bridge Challenge” game to answer these questions:**

3. Which bridge did you select for location 1 and why?

4. Which bridge did you select for location 2 and why?

5. Which bridge did you select for location 3 and why?

6. Which bridge did you select for location 4 and why?

7. What is currently the longest bridge in the world?

8. How long is the longest bridge in the world?

9. Where is the longest bridge in the world located?

**Use the “Forces Lab” to answer these questions:**

10. What is compression?

11. What is tension?

12. What is used to strengthen bridges built on soft soil?

13. What is used to strengthen bridges built in high wind areas?

**Name one pro (good thing) and one con (bad thing) about each type of material:**

14. Wood

15. Aluminum

16. Concrete

17. Cast Iron

18. Steel

**Use the “Shapes” part of the Forces Lab to answer these questions:**

19. What shape is strongest?

20. What shape is weakest?