

## Unit 8.6 Materials List

Consumable and Non-consumable kits are available for order through Kendall Hunt.  
To order or for more information, contact Sarah Zenner, [sczenner@kendallhunt.com](mailto:sczenner@kendallhunt.com).

Consider this a “Teacher’s Shopping List”. This list contains the physical materials that must be acquired to complete the unit’s lesson activities.

The materials are separated by consumables and non-consumables. Quantities per class listed are the maximum quantities you will need for one class assuming a class of 32 students.

**A note on printed materials:** Handouts, student guides, other paper materials and electronic resources are not listed here. Please refer to individual lesson plans for the most up-to-date links for these items to determine an actual page count of printed materials needed for a particular lesson.

| Consumable Materials                                                                                                                                                                           |                                 |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------|
| Description                                                                                                                                                                                    | Total Quantity Needed per class | Lesson |
| Markers or colored pencils<br><i>suggested colors: red, orange, yellow</i>                                                                                                                     | 16                              | 1-3, 6 |
| Poster paper or whiteboards                                                                                                                                                                    | 16                              | 1, 6   |
| Sticky notes                                                                                                                                                                                   | 96<br>(3 per student)           | 6      |
| Small box that fits inside the waterproof container (see Non-consumables list below) (e.g., empty pen box)                                                                                     | 3                               | 6      |
| Spaghetti, 1 lb. box                                                                                                                                                                           | 2                               | 6      |
| Mini-marshmallows, 10 or 16 oz. bag<br><br><i>The number of bags of marshmallows can vary depending on student designs and whether the marshmallows are reused from one class to the next.</i> | 2                               | 6      |
| Thin cardboard/empty cereal box                                                                                                                                                                | 8                               | 6      |
| Tape                                                                                                                                                                                           | 8                               | 6      |

| Non-consumable Materials                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------|
| Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quantity per class | Lesson |
| River Valley Flood Model (See <a href="#">8.6_L02_Uncover2_Teacher_RiverValleyModelSetup</a> for details about construction)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 8                  | 2      |
| 12" x 8" Aluminum pan<br><i>(This size is suggested because less clay is required to create the topography. Rectangular pans are best, but square pans can be used.)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 8                  | 2      |
| 5 lbs. oil-based modeling clay*<br><i>(Air-dry clay is not recommended because the models do not hold up well over repeated uses. Although oil-based modeling clay is expensive, these models can last for many years.)</i><br><br><b>*A note about oil-based vs. air-dry clay:</b><br>Air-dry clay is less expensive and more widely available than oil-based clay. However, it will dissolve in water after just a few "rains" on the model, even if dried thoroughly over several days beforehand. If you already have air-dry clay, one way you may make the model more water-resistant is by duct-taping the edges of the model down and painting the clay with waterproof glue. | 8                  | 2      |
| [Optional] Small bottle of blue waterproof paint or blue painter tape for decoration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1                  | 2      |
| 6-sided die                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 16                 | 2      |
| 7 oz. plastic cup with holes poked in the bottom<br>(if larger cups are used, have students fill only halfway)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 8<br>1             | 2<br>6 |
| Small bucket, to collect wastewater                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 8                  | 2      |
| Earthquake Machine<br>(a simple machine that demonstrates how the build-up and release of elastic energy causes earthquakes)<br><br>Instructions: <a href="#">Build an Earthquake Machine</a><br><i>Materials for construction are listed below.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1                  | 3      |

|                                                                                                                            |         |   |
|----------------------------------------------------------------------------------------------------------------------------|---------|---|
| <i>If your school has a shop class, you may be able to get the shop class to glue the sandpaper to the blocks for you.</i> |         |   |
| 4" x 4" wooden block, cut from 2" x 4" scrap wood                                                                          | 1       | 3 |
| 4" x 36" 50-grit sanding belt                                                                                              | 1       | 3 |
| 5" x 4" piece of 60 grit sandpaper                                                                                         | 1       | 3 |
| Screw eye #12 x 1-3/16                                                                                                     | 2       | 3 |
| Bag of rubber bands, varying sizes                                                                                         | 1       | 3 |
| Measuring tape                                                                                                             | 1       | 3 |
| Wood glue, for gluing sandpaper to the blocks                                                                              | 1       | 3 |
| Pencil                                                                                                                     | 1       | 3 |
| Drill with 3/16 drill bit, to drill pilot hole                                                                             | 1       | 3 |
| Deck of playing cards                                                                                                      | 8       | 5 |
| Sand (can be saved and reused)                                                                                             | ~250 mL | 6 |
| Fan                                                                                                                        | 1       | 6 |
| Waterproof container, such as a foil pan or plastic dishpan                                                                | 2       | 6 |
| [Optional] Empty copy paper box                                                                                            | 1       | 6 |