**Water Cycle and Weather Unit**

**Materials List for Supply Bins**

**Water Cycle Unit**

**Lesson #1: Introduction to the Water Cycle**

|  |  |
| --- | --- |
| **Item** | **Amount** |
| Plastic aquarium | 3 |
| Potting soil | 1 bag |
| Small plastic container | 3 |
| Plastic animals, etc. | 1 bag |
| Saran wrap | 1 |
| Masking tape | 1 |
| Heat lamp (with light bulbs) | 1 |
| Hot plate (provided only to Greylock, other schools can get a hot plate from the science supply room) | 1 |
| Metal pan | 1 |
| Glass beaker | 1 |
| Tongs | 1 |
| Water cycle diagram (color) | 30 |

**Lesson #2: Exploring the Water Cycle** (no provided materials)

**Lesson #3: Where is all the Water?**

|  |  |
| --- | --- |
| **Item** | **Amount** |
| Plastic globe ball of the earth | 1 |
| Ziti in bags (with 2 red and 1 green ziti) | 10 bags |
| All the Water on Earth pie graph student copies | 80 |

**Lesson #4: Making a Terrarium**

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| --- | --- |
| **Item** | **Amount** |
| Small gravel | 1 bag |
| Activated charcoal | 1  |
| Potting soil | 1 bag |
| Moss or another type of plant\* | 10 for each class |
| Clear packing tape  | 1 |
| Materials for a large class terrarium kit (optional) | 1 per class |

**\*Please notify Jen or Molly at least 2 weeks in advance before you need the moss/plants and if you would like the optional class terrarium.**

**Lesson #5: Water Cycle Story**

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| --- | --- |
| **Item** | **Amount** |
| Water cycle story student copies | 80 |

**Weather Unit**

**Lesson #1: Atmosphere and Air Pressure**

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| --- | --- |
| **Item** | **Amount** |
| Atmosphere diagram (color) | 30 |
| Objects in the atmosphere diagram (color) | 30 |
| Gallon jar | 1 |
| Made balance | 1 |
| Brown paper bags | 10 |
| Hot Air Balloon Book | 1 |
| **Optional Activity:** Straws Gallon plastic bags Masking tape | 3 boxes40 (reuse)1 |

**Lesson #2: Temperature**

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| --- | --- |
| **Item** | **Amount** |
| Making a thermometer instructions | 30 |
| Clear plastic water bottles | 10 |
| Rubbing alcohol | 3 bottles |
| Clear straws | 1 box |
| Modeling clay | 1 box |
| Food coloring | 1 box |
| Bowls | 6 |
| Thermometers | 15 |
| Indoor/outdoor thermometers | 4 |

**Lesson #3: Wind Direction**

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| **Item** | **Amount** |
| 2-liter soda bottles with taped hole, filled with peanuts | 7 |
| Extra Styrofoam packing peanuts | 1 bag |
| Fizz keeper pumps | 6-8 |
| Masking tape | 1  |
| Fan  | 1 |
| Compasses | 6 |
| Making a wind vane instructions | 30 |
| Wind vane cutouts | 30 |
| Heavy foam | 6 pieces |
| Unsharpened pencils | 3 boxes |
| Pen caps | 1 bag |
| Metal can  | 6-8 |
| Sand | 1 bag |
| Modeling clay | 1 box |

**Lesson #4: Wind Speed**

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| **Item** | **Amount** |
| Beaufort wind scale handout | 30 |
| Making an anemometer instructions | 30 |
| Pencils | 2 boxes |
| Small paper cups | 1 box |
| Straws | 2 boxes |
| Push pins | 1 container |
| Large plastic cups | 1 bag |
| Packing tape | 1 |
| Cardboard square | 24 |
| Fan | 1 |
| Anemometer | 1 |
| Wind chill chart handout | 30 |

**Lesson #5: Precipitation - Clouds**

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| **Item** | **Amount** |
| Ziploc bags (gallon) | 6 |
| Cloud types handout (color) | 30 |
| Cotton balls | 3 bags |
| Optional Activity:  Identifying cloud types (student  copies) Brad paper fastener | 801 box |

**Lesson #6: Types of Precipitation**

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| **Item** | **Amount** |
| Pictures of precipitation | 3 sets |
| Glass and plastic containers | 1 bag |
| Tape | 1 |

**Lesson #7: Air Pressure and Air Fronts**

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| **Item** | **Amount** |
| Large glass jar | 1 |
| Balloons | 1 bag |
| Lighter | 1 |
| Newspaper | 1 section |
| Large balloons | 1 bag |
| Straws | 1 box |
| Index cards (3” x 5”) | 1  |
| Rubber bands | 1 bag |
| Duct tape | 1 |
| Metal can | 3 |
| Glass beaker | 1 |
| Plastic cup | 1 |
| Food coloring | 1 box |
| Oil | 1 |
| Warm and cold air fronts handout  | 30 |

**Lesson #8: Humidity**

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| **Item** | **Amount** |
| Cobalt chloride strips | 2 vials |
| Masking tape | 1 |

**Lesson #9: Weather and Climate**

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| **Item** | **Amount** |
| Climate comparisons | 30 |
| Temperature graph | 80 |
| Precipitation graph | 80 |

**Ongoing Weather Activities**

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| --- | --- |
| **Item** | **Amount** |
| Weather station (outside) | 1 |
| Digital weather station | 1 |
| Student weekly weather recording sheets: Temperature and Precipitation Wind Direction and Speed Air Pressure and Humidity Cloud Coverage and Cloud Types | 40 of each sheet |
| Teacher weekly weather recording sheet | 20 |
| Monthly weather chart | 3 |
| Daily weather chart (with Velcro labels) | 3 |
| Erasable markers | 3 sets |