



# Nature-Watch Activity Kit

## Weather Window

### Weather Window Kit Contents

| Item:             | Kit Size |    |     |
|-------------------|----------|----|-----|
|                   | 1        | 25 | 100 |
| Window Frames     | 1        | 25 | 100 |
| Cloud Photo Sets  | 1        | 25 | 100 |
| Craft Sticks      | 1        | 25 | 100 |
| Glue              | 0        | 1  | 2   |
| Instructor Manual | 1        | 1  | 1   |

*This page includes the Next Generation Science Standards (NGSS) mapping for this kit and a Science, Technology, Engineering, and Math (STEM) chart (on back) to use in adapting and extending this activity to other subject areas. The NGSS mapping and STEM chart are brought to you by Resource Area For Teaching (RAFT) in partnership with Nature-Watch.*

*Nature-Watch and Resource Area For Teaching (RAFT) are both dedicated to providing the best in hands-on experiential teaching resources for educators and their students.*

*For more information visit:*  
[www.nature-watch.com](http://www.nature-watch.com) and  
[www.raft.net](http://www.raft.net)

### **Next Generation Science Standards Alignment**

#### **K-ESS3-2:**

Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

#### **3-ESS2-1:**

Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

#### **5-ESS2-1:**

Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

#### **MS-ESS2-4:**

Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.

**See Back for STEM Chart**

## Science

- Identify wind direction and predict weather conditions in an area based on the cloud type approaching that area
- Create a list of common features for each cloud type on the device

## Technology

- Visit <http://scied.ucar.edu/webweather/clouds/cloud-types> to learn more about various cloud types
- Create a slide presentation on extreme weather conditions associated with cloud types, including visuals like photos and video

## Weather Window

## Engineering

- Develop a method for attaching a camera to the device so that photos of the viewing window can be taken
- Build a structure with minimal materials that can keep an area of 10' x 10' dry in rainy weather.

## Math

- Visit <http://sciencenetlinks.com/lessons/measuring-cloud-coverage/> for an activity on measuring cloud coverage
- Visit <http://www.makinglearningfun.com/theme/pages/WeatherMathIdeas.htm> for math activities on clouds and weather

