**Clouds, Water Cycle and Storms**

**Due Date: May 5**

The Big Idea: Weather Patterns

The essential question: How do air masses form and produce changes in the weather?

|  |  |
| --- | --- |
| Directions | Examine the activities you can do to learn the unit objectives. All of the activities and the dates we are doing them are on the unit calendar. The due dates are listed under ‘Activities’. The unit ends on 5/5, no work will be accepted after that date. The test is on 5/6. \*\***The Review Guide and Independent Work are due on 5/5 and will not be accepted late.\*\***The activities in bold are required for every student to do. These will help you learn the basics. After you have mastered the basics, move to the Independent Work section for a more challenging activity. **\*\*It is your responsibility to complete assignments on time according to the due dates listed. By not turning in assignments you will receive a ZERO for that assignment. You have three school days to turn in late assignments (unless the end of the unit is before that). Late assignments will receive a 25% penalty for every school day they are late. \*\*** |
| Objectives | * Describe how the Sun’s energy drives the water cycle.
* Give local examples of where the water cycle can be seen
* Explain how clouds form
* Name the main types of clouds
* Explain how storms form
 |
| State StandardsAddressed | INQE Use the model to explore the relationship between two variables and point out how the model is similar to or different from the actual phenomenon.SYSA Given a system, identify subsystems and larger encompassing systemsSYSC The output of one system can become the input of another system.ES2B Describe the role of the Sun in the water cycleES2C Describe local examples where the water cycle can be seen |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| **4/20**Introduction to the UnitBill Nye ‘Water Cycle’ Video and Questions | **4/21**‘A Drop in the Bucket’ Activity | **4/22**Modeling the Effects of Air Pressure on Cloud FormationGLAD States of Matter | **4/23**Grade ‘A Drop inthe Bucket’ActivityCloudy LogicActivity | **4/24**Water Cycle Game Start ‘Journey of a Raindrop’ Cartoon |
| **4/27**Grade Cloudy Logic‘Journey of a Raindrop’ Cartoon | **4/28**Hurricane Stations | **4/29**Hurricane Stations | **4/30**NOVA ‘Deadliest Tornadoes’ Video | **5/1**Tornado Walk |
| **5/4**Grade Tornado Walk and Hurricane StationsCompare/Contrast Tornadoes and HurricanesReaders Theatre? | **5/5**Review Guide and Independent Work Due.Clicker Questions | **5/6****TEST** | **5/7** | **5/8** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Points Possible** | **Due Date** | **✓** |
| A Drop in the Bucket Activity | 10 | 4/23 |  |
| Modeling the Effects of Air Pressure on Cloud Formation | 10 | 4/24 |  |
| Cloudy Logic | 10 | 4/27 |  |
| Journey of a Raindrop Cartoon | 15 | 4/29 |  |
| Tornado Walk | 10 | 5/4 |  |
| Hurricane Stations | 20 | 5/4 |  |
| Compare/Contrast Tornadoes and Hurricanes | 5 | 5/4 |  |
| Independent Work | 15 | 5/5 |  |
| Review Guide | 10 | 5/5 |  |
| Test | 150 | 5/6 |  |

**Independent Work** (Must be typed unless otherwise noted)

|  |  |  |  |
| --- | --- | --- | --- |
| Water Cycle Children’s Book | 15 | 5/5 |  |
| Water Cycle Poem \*Must be typed\* | 15 | 5/5 |  |
| Importance of Water Research Essay \*Must be typed\* | 15 | 5/5 |  |
| Temperature of Water vs Evaporation and Condensation Lab | 15 | 5/5 |  |
| Interview and Adult About a Powerful or Severe Storm | 15 | 5/5 |  |
| Explain the Water Cycle to an Adult | 15 | 5/5 |  |
| Hurricane Newspaper Article \*Must be typed\* | 15 | 5/5 |  |
| Tornado Damage Report \*Must be typed\* | 15 | 5/5 |  |
| Chasing Andrew \*\*10 POINTS EXTRA CREDIT\*\* | 15 | 5/5 |  |