**The Atmosphere Unit**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_

**Due Date: February 24**

The Big Idea: Structure of Earth’s Atmosphere

How do air pressure and temperature vary in the atmosphere?

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| **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 2/24, no work will be accepted after that date. The test is on 2/24. \*\***The Review Guide and Independent Work are due on 2/2 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. Late assignments will receive a 25% penalty for every school day they are late. \*\*** |
| **Objectives** | * Describe the composition of Earth’s atmosphere. * Identify some properties of air. * Explain how increasing altitude affects air pressure and density. * Identify the four main layers of the atmosphere. * Describe the characteristics of each layer. |
| **State Standards**  **Addressed** | SYSA Given a system, identify subsystems and a large encompassing system.  SYSC Give an example of how output of matter or energy from a system can become input for another system.  ES2A Describe the composition and properties of the troposphere and stratosphere. |

Use the calendar to document your progress each day.

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| --- | --- | --- | --- | --- |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
|  | **2/3**  **Atmosphere Pre-Test**  **Anticipation Guide** | **2/4** | **2/5** | **2/6**  **Intro Atmosphere Unit**  **Air Bags**  **Activity** |
| **2/9**  **Chapter 15 Section 1 Reading and**  **Questions** | **2/10**  **GLAD Air**  **Pressure and**  **Density**  **Questions** | **2/11**  **Review and**  **Grade Air Bags,**  **Chapt 15 Sect 1**  **and GLAD**  **Questions** | **2/12**  **Layers of the**  **Atmosphere**  **Activity** | **2/13**  **Layers of the**  **Atmosphere**  **Activity**  **Chapter 15**  **Section 3**  **Reading and**  **Questions** |
| **2/16**  **No School**  **Presidents Day!** | **2/17**  **Chapter 15**  **Section 3**  **Reading and**  **Questions cont.**  **Introduce**  **4-3-2-1 Liftoff**  **Drawing** | **2/18**  **4-3-2-1 Liftoff**  **Drawing** | **2/19**  **Grade Layers of**  **the Atmosphere**  **Activity,**  **Chapt 15 Sect 3,**  **Atmosphere**  **Cube** | **2/20**  **SSR** |
| **2/23**  **Bill Nye**  **Mythbuster’s**  **‘Meat Man’** | **2/24**  **Grade 4-3-2-1**  **Liftoff Drawing**  **Independent**  **Work Due**  **Review Guide**  **Due/Review** | **2/25**  **TEST** |  |  |

**Practice Assignments**

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| **Assignment** | **Points** | **Due Date** | [https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcRh-HxsjphYyV7XFIPG_xMM4eZiWfR8xiYA8R8bPen2NXJxCRKZ](https://www.google.com/imgres?imgurl=http://upload.wikimedia.org/wikipedia/commons/thumb/9/90/Check_mark_23x20_02.svg/1081px-Check_mark_23x20_02.svg.png&imgrefurl=http://commons.wikimedia.org/wiki/File:Check_mark_23x20_02.svg&docid=Yo-B82BI0D1SCM&tbnid=nW0ZWzGjK7efIM:&w=1081&h=1024&ei=gZvNVPiaOcfBggSRkITwAg&ved=0CAIQxiAwAA&iact=c) |
| Air Bags Activity | 10 | 2/9 |  |
| Chapter 15 Section 1 Questions | 10 | 2/10 |  |
| GLAD Questions | 10 | 2/12 |  |
| Layers of the Atmosphere | 15 | 2/17 |  |
| Chapter 15 Section 3 Questions | 10 | 2/18 |  |
| 4-3-2-1 Liftoff | 30 | 2/20 |  |
| Bill Nye ‘Atmosphere’ | 5 | 2/23 |  |
| Review Guide | 10 | 2/24 |  |
| Test | 175 | 2/25 |  |

**Independent Work**

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| --- | --- | --- | --- |
| **Assignment** | **Points** | **Due Date** | [https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcRh-HxsjphYyV7XFIPG_xMM4eZiWfR8xiYA8R8bPen2NXJxCRKZ](https://www.google.com/imgres?imgurl=http://upload.wikimedia.org/wikipedia/commons/thumb/9/90/Check_mark_23x20_02.svg/1081px-Check_mark_23x20_02.svg.png&imgrefurl=http://commons.wikimedia.org/wiki/File:Check_mark_23x20_02.svg&docid=Yo-B82BI0D1SCM&tbnid=nW0ZWzGjK7efIM:&w=1081&h=1024&ei=gZvNVPiaOcfBggSRkITwAg&ved=0CAIQxiAwAA&iact=c) |
| Air Pressure in the Troposphere | 15 | 2/24 |  |
| Atmospheres of Earth and Venus | 15 | 2/24 |  |
| Building a Barometer | 15 | 2/24 |  |
| Composition of Earth’s Atmosphere | 15 | 2/24 |  |
| Gas Molecule Story | 15 | 2/24 |  |
| Graph Atmospheric Data | 15 | 2/24 |  |
| Greenhouse Effect Lab | 15 | 2/24 |  |
| How Earth’s Atmosphere Got Its Oxygen | 15 | 2/24 |  |
| Postcard to Mrs. Nelson: No Atmosphere- Yikes! | 15 | 2/24 |  |
| Travel into the Atmosphere in a Hot Air Balloon | 15 | 2/24 |  |
| Greenhouse Effect  \*\*5 points Extra Credit\*\* | \*\*20\*\* | 2/24 |  |