**Weather Portfolio**

A portfolio is a collection of work designed to show that you know about something. The portfolio you put together will be a result of lab experiences, classroom activities, research and reading days to help build your knowledge base. I will also plan “work days” for you to plan, research and organize your portfolio.

**Time Line:**

Four weeks starting November 11th and ending December 16th. Summative assessment (test) Will be December 16th.

You will continue to use the same binder with dividers. The dividers will separate your work into the following sections.

1. Syllabus/knowledge map
2. Objectives
3. Assessments
4. Class work/Labs
5. Notes

CHANGES: Formative assessments will replace some of the objectives. You will be evaluated on five formative assessments and one summative assessment (test).

**Requirements:**

1. Take each of the formative assessments.
2. Demonstrate knowledge of at least 4 of the minimum objectives. Knowledge is demonstrated by written work however; you may supplement written work with drawings, diagrams, and electronic media such as podcasts or videos (of your own design)
3. Work may be hand written or typed each objective **must be at least a ½ page** final copy quality**.**
4. All notes from research and handouts from labs and class work must be placed in the portfolio.

**Resources:** Much of the work will be done in class, however plan on doing some work on your own at home.

1. Textbook and on-line textbook, especially “visual concepts” in the eActivities section.
2. Knowledge map
3. Resource books used in class.
4. Lessons, videos and labs completed in class
5. Internet resources: specific sites will be added throughout the unit to the “links” section on Mr. Stephens’ page on the school website.
6. Expert or guest speaker at least one expert is invited to come in during the unit.
7. Personal experience-see Mr. Stephens if you think this may apply.
8. **If you use information from an outside source it must be included on the assignment…failure to do so will result in an automatic deduction of 1.5 quality points!**

**Minimum Objectives:**

The purpose of the objectives is to give you a framework for what is to be learned. Objectives should be numbered in your portfolio as they are below. You MAY NOT combine objectives. If you are substituting electronic media for written work put a short note of explanation in the binder as a placeholder.

1. Get quizzed during advisory or intervention on 6 random statements from # 1-48 on the knowledge map. (Answer all 6 questions right on the first try for a 4, second a 3.5 third a 3, etc.)
2. Make flash cards of the vocabulary terms listed on page 38, 46, 52, and 60 (total of 18 words). Then have Mr. Stephens test you on them.
3. Make a study guide for Chapter 2. Must meet ALL of the following criteria: at least 10 multiple choice or matching questions with at least 4 choices, two extended response questions, at least two questions from each of the four sections in the chapter, include one blank copy and a key.
4. Explain what an **air mass** is and then explain how the properties of an air mass depend on where it forms. **Also** name the four basic kinds of air masses and what their characteristics are.
5. Explain what a front is **and** how each of the four types is formed (what types of air masses) **as well as** what type of weather is associated with each.
6. Explain the basics of how clouds form **and** **then** describe each of the three main types **as well as** at least one sub type of each main cloud. (**Suggestion:** Make a dichotomous key to classify 8 of the types of clouds on page 43. Include a picture and description (or model made with cotton balls) of each type of cloud.)
7. Identify the instruments used to measure air temperature, wind direction, wind speed, rainfall and relative humidity **AND** briefly explain how they work.
8. Compare and contrast humidity and relative humidity**.**

**Formative assessments:**

About once a week there will be a formative assessment (like a quiz) on what we have learned since the previous formative assessment.

1. Water in the air
2. Clouds
3. Air masses and fronts
4. Severe weather
5. Forecasting weather

Each of the formative assessments will count the same as an objective and you will have two chances to get your best score.

**PORTFOLIO ASSESSMENT SHEET**

|  |  |
| --- | --- |
| **SCORE** | **CATEGORY** |
|  | **Formative assessments:** |
|  | Water in the air | Clouds | Air masses and fronts | Severe weather | Forecasting the weather |
| **Formative assessment total:** |  |  |  |  |  |
|  |  |  |  |  |
|  | **Binder** |
|  | 1. Cover page
 |
|  | 1. Notes
 |
|  | 1. class work /labs
 |
|  | **Objectives (minimum 4)** |
| **Objective subtotal** | 1. | 2. | 3. | 4. | 5. |  |
| 6. | 7. | 8. |  |  |  |
|  | **TOTAL** |
| **average** | TOTAL DIVIDED BY **12**4.0-3.5 = A 3.49-3.0 = B 2.99-2.0 = C 1.99 -1.5=D1.49 and below unacceptable. Correct and resubmit. |

**FORECASTING WEATHER**

**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ CLASS: \_\_**

**Portfolio log sheet**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entry #** | **Date** | **Description of activity** | **Time spent** | **where** |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |
| **5** |  |  |  |  |
| **6** |  |  |  |  |
| **7** |  |  |  |  |
| **8** |  |  |  |  |
| **9** |  |  |  |  |
| **10** |  |  |  |  |
| **11** |  |  |  |  |
| **12** |  |  |  |  |
| **13** |  |  |  |  |
| **14** |  |  |  |  |
| **15** |  |  |  |  |
| **16** |  |  |  |  |
| **17** |  |  |  |  |
| **18** |  |  |  |  |
| **19** |  |  |  |  |
| **20** |  |  |  |  |
| **21** |  |  |  |  |
| **22** |  |  |  |  |
| **23** |  |  |  |  |
| **24** |  |  |  |  |
| **25** |  |  |  |  |
| **Entry #** | **Date** | **Description of activity** | **Time spent** | **where** |
| **26** |  |  |  |  |
| **27** |  |  |  |  |
| **28** |  |  |  |  |
| **29** |  |  |  |  |
| **30** |  |  |  |  |
| **31** |  |  |  |  |
| **32** |  |  |  |  |
| **33** |  |  |  |  |
| **34** |  |  |  |  |
| **35** |  |  |  |  |
| **36** |  |  |  |  |
| **37** |  |  |  |  |
| **38** |  |  |  |  |
| **39** |  |  |  |  |
| **40** |  |  |  |  |
| **41** |  |  |  |  |
| **42** |  |  |  |  |
| **43** |  |  |  |  |
| **44** |  |  |  |  |
| **45** |  |  |  |  |
| **46** |  |  |  |  |
| **47** |  |  |  |  |
| **48** |  |  |  |  |
| **49** |  |  |  |  |
| **50** |  |  |  |  |