

Backward Design Planning Template
Adapted From — Wiggins & McTighe, *Understanding by Design*

CLASS: 7th Grade Science
TITLE: Weather Forecast
DATE(S): 2 Weeks (April 16-28)
TEACHER: Chelsea Sayre

STAGE 1: Desired Results

Established Goals: *Students will be able to...*

Understand and predict weather patterns when given all conditions. (ESS.8.7.7)
Identify elements of weather. (ESS.8.7.5)
Identify causes and effects of weather related phenomena. (ESS.8.7.8)
Explain tornado belt weather patterns using a map of the United States (8.7.9)
Describe ways human beings protect themselves, others and their property from adverse weather conditions. (8.7.10)
Investigate careers, scientists, and historical breakthroughs related to atmosphere and weather. (8.7.15)

Enduring Understandings: *Students will understand that...*

Students will understand that changes in weather can be caused by several different things. Students will understand how to predict what changes in certain systems will cause. Students will learn how to meteorologist predict the weather and what equipment is used.

Essential Questions: *Students should be able to answer these questions...*

What causes a tornado?
What is the difference between a hot front and a cold front?
What are the main types of storms and how do they form?
How do weather forecasters use observations and data?
What equipment is used to help predict the weather?

STAGE 2: Assessment Evidence (GRASPS)

Performance Task(s): *What will students do to show what they have learned? (List assessments)*

Performance criteria: *How good is good enough to meet standards? (Include scoring guides, rubrics, etc.)*

PERFORMANCE TASK # 1 : Vocabulary

Goal:	Students will learn new vocabulary.
Role:	Students will collect vocabulary from different weather forecast and create a word wall that they will use in their presentations.
Audience:	Class
Situation:	Students will watch several weather broadcast and will create a word wall using vocabulary from the recordings that they did not know.
Product/performance and purpose:	Students will create a word wall to use in their presentations.
Standards of Success:	Students are to come up with 5 vocabulary words that they do not know and define them and then draw a picture depicting what they believe the meaning is.

PERFORMANCE TASK # 2 : Presentation

Goal:	Students will understand what is entailed with predicting the weather and creating weather forecast. Students will also be able to identify what causes weather changes.
Role:	Students will create a weather forecast and act as meteorologist, editor, and visual effects person.
Audience:	Class
Situation:	Students will create and present their own broadcast of a weather report covering a specific storm system.
Product/performance and purpose:	Students will create and present their broadcast. Students will show their understanding of the weather during their broadcast.
Standards of Success:	Students will be able to present their projects with a score of at least 60% using the rubric.

PERFORMANCE TASK # 3 : Report

Goal:	Students will be able to predict weather patterns and identify elements of weather. Students will be able to identify causes and effects of weather related phenomena.
Role:	Students will create a report after researching their weather system that they are going to report over.
Audience:	Class
Situation:	Students will create a report covering their storm system that they were assigned.
Product/performance and purpose:	Students report will cover the storm system that they were assigned and cover the different elements that cause the storm system.
Standards of Success:	Students will follow the rubric with at least 60% accuracy.

PERFORMANCE TASK # Type here :

Goal:	Type here
Role:	Type here
Audience:	Type here
Situation:	Type here
Product/performance and purpose:	Type here
Standards of Success:	Type here

STAGE 3: Learning Plan (WHERE TO)

Learning activities: *What should an observer expect to see at any given moment?*

- *W = where and what and why*
- *H = hook and hold*
- *E = equip, experience, and explore*
- *R = reflect, rethink, and revise*
- *E = exhibit and evaluate*
- *T = tailor and tweak (3.1)*
- *= organize, order, and overhaul (3.2)*

Day 1 - After completing bell work and taking roll, we will have our entry event for our PBL project. Students will watch several clips of different weather forecast on youtube. During the course of watching the forecast students are to write any words that they do not know or understand the way it was used. Students are also to write any words they feel are important. Students were assigned to look up at least four of the words that they had written down and watch the weather forecast that night and write a short summary over it. (Vocabulary - forecast, tornado, EF scale, hurricane, torrential, severe, category, catastrophic, winter storm)

Day 2 - After completing bell work and taking roll, students will use their homework and create a project word wall that they will use in their presentations. Students will also be assigned their project topic as well as their partners. Students will be given a copy of the rubrics and be told the requirements of the presentation. (After completing this project I found a few clips of a fifth grade class that completed a project similar that I will show the next go around. About half of my students made them presentations instead of more like a weather forecast. I will also change my list of products to weather forecast instead of presentation.)

Day 3-5 - Students worked in their groups to complete research and work on their rough drafts and presentations.

Day 6 - Rough draft due. Students were to turn in their rough drafts. (Students did not have their rough draft completed at the beginning of class so they were allowed to spend the day finishing them up. Next time I will put more emphasis on completing the rough draft and also try to do a better job defining what a rough draft is.)

Day 7 - After bell work and roll, students did sort of a gallery walk. I printed out copies of the rough drafts and gave out sticky notes for the students to be able to read and make suggestions using the "I Like..." and "I Wonder..." methods. (Due to the students still not having the rough drafts ready this did not go as planned. Next time I would like to make sure that ALL rough drafts are turned in the day before the gallery walk so I can prepare them before class.)

Day 8 - After bell work and roll, students are to use this day to complete any props and last minute adjustments to their presentations. (I had several groups who were ready and used this day to rehearse)

Day 9 and 10 - After bell work and roll, students will start to present their projects. Students presentations were recorded to be edited and posted on the school's website.