

Grade: 6

Title: The Time Before Clocks

Standards

6.1.2-Give examples of different ways scientists investigate natural phenomena and identify processes all scientists use, such as collection of relevant evidence, the use of logical reasoning, and the application of imagination in devising hypotheses and explanations, in order to make sense of the evidence.

6.5.5-Explain the strengths and weaknesses of using an analogy to help describe an event, object, etc.

Goals and Objectives

Students will be able to measure a given amount of time.

**Students will be able to record “how” they estimated a given amount of time.
Students will be able to work cooperatively in groups to experience a given amount of time.**

Students will be able to evaluate and justify with evidence their method of measuring time.

Materials:

Teacher-wristwatch with a second hand or stop watch

Students- any materials they deem necessary to estimate time

Pencil and paper (science journal) to record procedure and outcome

1. Activities:

Outside estimation of time

Development and justification of methodology of telling time

KWL chart

Guess how long is a minute

Practice minute long activities

Homework worksheet

Procedures:

- 1. Go outside without any time keeping devices and return to teacher in 5 minutes (teacher records with tally marks—early, on time, late as a review)**
- 2. In a group of 2 or 3 proceed back outside and repeat procedure with groups developing and justifying a method for recording time.**
- 3. Groups will record their findings in their journals or on paper and develop a KWL chart about measuring time**
- 4. Students stand up as a class and sit down when they think a minute has passed. Repeat activity several times.**
- 5. Teacher selects activities to perform in a minute ie. jumping jacks, write the alphabet, write their name, sit ups.**

6. Complete worksheet as homework return and discuss the next day (see attached sheet)

Assessment:

**Teacher observation of students' methodology and record of time
Worksheet worth 20 points**

Name _____

Lesson 1 Time & Measurement

Songs, Movies , Sayings, etc. with “Time”

1. _____
2. _____
3. _____
4. _____
5. _____

I can do _____ # _____ in 1 minute.

6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Ways the workforce uses time

- 16. _____
- 17. _____
- 18. _____
- 19. _____
- 20. _____

Different ways you use time.

- 21. _____
- 22. _____
- 23. _____
- 24. _____
- 25. _____