

Lesson 5: The Sun / Mind Mapping



Content: Language Arts/ Science

PLANNING PHASE

Performance Objectives:

1. Students will be able to brainstorm facts about the sun by using a KWL handout
2. Students will become familiar with and will be able to read a non-fiction book about the sun.
3. Students will be able to use the post reading strategy *mind mapping* to organize and remember information
4. Students will be able to work cooperatively with peers.

Lesson Outline

Overall Description:

The purpose of this lesson get the students familiar with facts about the sun, read a book about it, visualize the content and create a mind map in a small group.

National Standards: TESOL Standards

Oral and Written Language

Goal 1, Standard 3:

- ❑ Students will listen to and imitate how others use English.

Goal 2, Standard 1:

- ❑ Students will be able to participate in full class, group, and pair discussions.

This lesson follows the Fairfax County Public Schools' Middle School sixth, seventh and eight grade Program of Studies (POS), which expand the State of Virginia Standards for Learning (SOLs).

Standard 1: Students read and write a variety of forms

Benchmarks

MS 1.2. Students read and write for a variety of purposes.

ESOL Indicators:

- ❑ Read to gain information and develop academic language proficiency.
- ❑ Read a variety of materials to build vocabulary, acquire language patterns, and develop fluency.

MS 1.3 Students expand and enhance vocabulary through language and literature.

ESOL Indicators:

- ❑ Recognize words and phrases as units of meaning.

Standard 2: Students use strategies to construct meaning when working with language.

Benchmarks

MS 2.4 Students use collaborative leaning strategies

ESOL Indicators:

- ❑ Demonstrate collaborative skills, as taking turns, voice level, social skills, etc.

Standard 3: Students adapt their language to communicate.

Benchmarks

MS 3.3 Students use grammar and conventions of language in writing and speaking

ESOL Indicators:

- ❑ Begin to recognize basic structures including sound-symbol relationships and sentence patterns in writing and speaking

TEACHING PHASE

(1) Preparation

Warm-Up Activity:

The warm-up activity will focus on tapping into prior knowledge and using a KWL handout (see attachment)

- ❑ Teacher refers to weather, temperature and heat, concepts that were discussed all week long and leads the students to think about the major source of energy our Sun.
- ❑ Teacher passed out handout (see appendix) and models the use of the KWL strategy on an overhead transparency.
- ❑ Students are encouraged to use their homework assignment with the 5 facts about the SUN, collaborate with a partner if desired.
- ❑ Students fill in column one and two; share results with small group/class.
- ❑ Results are recorded on transparency and discussed with the class.

Strategy: prereading strategy: brainstorm collaboratively, share results with class, opportunity for teacher to check actual facts and misconceptions

Language Goals

Students will learn how to brainstorm using a prereading strategy KWL, listen to the answers of his peers, and share their own with the class.

(2) Presentation

a. Activity 1: Introducing the mind-mapping project

- ❑ Teacher introduces the trade book “ The Sun” (by National Geographic) and shows a teacher-prepared exemplar of a mind map. The Sun is the center and title of the poster; the main ideas of four chapters are presented on extensions from the center. Students are encouraged to visualize concepts, draw colorful pictures, and support them with short summaries or a bulleted list of the most important facts.

Activity 2: Introducing text

- ❑ Teacher introduces the organization of the book ” The Sun” and points to various pages of the book, the layout of chapters and subtitles, pictures and diagrams, and the new vocabulary in the glossary in the back.

Activity 3: Using Post-It notes while reading

- ❑ Students are encouraged to use Post-it notes on pages to summarize the most important facts while reading. Students read collaboratively with a partner, are encouraged to use the glossary or dictionary to look up unknown words; and to ask for clarification.

b. Extension:

Activity: Mind-Mapping.

- ❑ Students receive poster paper and markers to work on their mind map.

Cooperative Strategy: Working with a partner or in small group.

(3) Practice:

- ❑ Homework: Fill in the third column of your KWL handout

(4) Evaluation

- ❑ Using a self-assessment rubric for grading the poster (see attachment).
- ❑ Informal performance evaluation based on working w/ partner, small group and class participation.

(5) Expansion/Extension:

- ❑ Presenting mind-map in front of a small group/class

Four Skills Used in This Lesson:

1. *Listening Activity:* Students listen to teacher's explanations on how non-fiction text is organized, listen to other students during brainstorming discussion; and to presentations.
2. *Speaking Activity:* Students share prior knowledge about the sun, present project to class.
3. *Reading Activity:* Students read a trade book about the Sun.
4. *Writing Activity:* KWL, mind-map.

Methods/Approaches/Strategies

- ❑ KWL warm up: Tapping into prior knowledge
- ❑ Using Post-it notes during reading.
- ❑ Cooperative learning strategies are implemented throughout the lesson.
- ❑ Using post reading strategy: Mind mapping to visualize and remember content.
- ❑ Differentiation: Beginning readers might focus on fewer chapters in the book.
- ❑ Pairing up students of various reading levels

Other Activities:

Follow-up:

- ❑ Other concepts to visualize in a mind-map: water cycle (evaporation, condensation, and precipitation), types of clouds
- ❑ *Fact or Fiction Handout* about the Sun

Assessment:

- ❑ Assessment will be formal, based on a self-assessment rubric
- ❑ Informal: classroom participation.
- ❑ Mind map is assessment of reading comprehension

Homework (extension):

See above, handouts

Technology:

- ❑ Agenda will be displayed on an overhead transparency.
- ❑ Computer clip art to design handouts

Materials:

- ❑ Warm up activity: KWL student handout and transparency
- ❑ Book: “The Sun” (National Geographic) / Sample page see appendix
- ❑ Rubric & self-assessment / student handouts
- ❑ Poster paper & markers
- ❑ Post-it Notes
- ❑ Dictionaries

Books and Websites Used to Prepare This Lesson Plan

- ❑ Fairfax County Public Schools. (2002). *Middle school A-level alignment with the middle school*. Fairfax, VA: Author.
- ❑ Mallow, F., & Patterson, L. (1999). *Framing literacy: Teaching/learning in K-8 classrooms*. Norwood, MA: Christopher-Gordon Publisher.
- ❑ National Geographic Society. (2002). *The Sun*. Washington, D.C.: National Geographic Society.
- ❑ Peregoy, S. F., & Boyle, O. F. (2001) Reading, writing & learning in ESL: A resource book for K-12 teachers (3rd ed) . New York: Longman.
- ❑ www.tesol.org

Closure:

The teacher summarizes the lesson and asks the students what would happen if there would be no sun & share during the next class period.

Appendix, Lesson 5