Sept. Grade 1 G&T Unit 1: Trees

Content Area: **Gifted and Talented**
Course(s):
Time Period: **September**
Length: **4-5Weeks**
Status: **Published**

Unit Overview

Students will ulilized critical thinking skills in the study of "Trees."

Enduring Understandings

Trees undergo many changes along with the seasons.

Studying trees helps us understaqnd life cycles.

Essential Questions

what steps do scientists take to study and think about trees in nature?

Instructional Strategies & Learning Activities

Day 1

- Pass out field journals. What is a field journal?
- Read Tree by Techentrup (I have in classroom). Ask students to check off the vocab words they hear while I read. Post the vocab sheet on the chart paper and check off as we go. List each season name as we read it on chart paper. Put fall and autumn- discuss.
- 1st grade- fill out the seasons handout where they list what they see in each season.
- Go over questions you might answer about your adopted tree from first page in packet.
- What is deciduous? Conifer? Use powerpoint pictures of both types of trees. Define them in the vocab. Sheet towards the back.

Day 2

- Label first observation sheet with “deciduous adopted tree”
- Go outside and measure trunk, draw leaves, gather leaf sample and tape in each of their journals- look for galls
- Bring in leaves from home to identify for homework

Day 3

- Go over observations from first site visit
- Color deciduous tree in all seasons paper in packet
- Why do leaves change color? Word document explaining it in folder.
- Try to identify our tree using a leaf with this website http://www.oplin.org/tree/index.html or https://www.arborday.org/trees/whatTree/whatTree.cfm?ItemID=E6A

- Look up what a gall is and put on defin. sheet (if leaves have bumpy galls)
- Read magic school bus book about leaves
- Label glossary of a leaf page with simpler terms- petiole=stem…

Day 3

- Site visit to tree and draw/write how it's changed- have more leaves fallen off yet?
- Gather leaves for leaf rubbings outside and bring inside to do rubbings- label parts of the leaf
- Leaf pressing with wax paper (in cabinet next to my desk and ironing board cover in file cabinet by Iditarod project). Label some of the parts of the leaf with crayon when cool.
- Read Terrific Trees and A Busy Year- in book room

- Life of a tree- shows layers of tree and complete journal page that matches - https://www.arborday.org/kids/carly/lifeofatree/
- Do journal page with tree rings
- (2nd grade only) Majestic Tree timeline and complete homework sheet about what trees see https://www.arborday.org/kids/carly/majestictrees/

Integration of Career Readiness, Life Literacies and Key Skills

9.4.2.CI	Creativity and Innovation
9.1.2.CAP	Career Awareness and Planning
	Brainstorming can create new, innovative ideas.
	Different types of jobs require different knowledge and skills.
9.1.2.CAP.1	Make a list of different types of jobs and describe the skills associated with each job.
9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
9.4.2.CT	Critical Thinking and Problem-solving
	Critical thinkers must first identify a problem then develop a plan to address it to effectively solve the problem.

9.4.2.CT.1	Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2).
9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
9.4.2.DC	Digital Citizenship
9.4.2.DC.3	Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).

Technology and Design Integration

Smartboard and document cameras.

CS	Computing Systems
	Individuals use computing devices to perform a variety of tasks accurately and quickly. Computing devices interpret and follow the instructions they are given literally.
8.1.2.CS.1	Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.
	A computing system is composed of software and hardware.
8.1.2.CS.2	Explain the functions of common software and hardware components of computing systems.
8.1.2.NI.2	Describe how the Internet enables individuals to connect with others worldwide.

Interdisciplinary Connections

LA.RI.1.1	Ask and answer questions about key details in a text.
LA.RI.1.2	Identify the main topic and retell key details of a text.
LA.RI.1.3	Describe the connection between two individuals, events, ideas, or pieces of information in a text.
LA.RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
LA.RI.1.5	Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.
LA.RI.1.6	Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
LA.RI.1.7	Use the illustrations and details in a text to describe its key ideas.
LA.RI.1.8	Identify the reasons an author gives to support points in a text and explain the application of this information with prompting as needed.
LA.RI.1.9	Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).
LA.RI.1.10	With prompting and support, read informational texts at grade level text complexity or above.
1-LS1-1.LS1.A.1	All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.
1-LS1-1.6.1	students observe the shape and stability of structures of natural and designed objects are

	related to their function(s).
LA.W.1.2	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.
LA.W.1.3	Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.
LA.SL.1.1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
LA.SL.1.4	Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.
LA.SL.1.5	Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.
LA.SL.1.6	Produce complete sentences when appropriate to task and situation.
LA.L.1.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Differentiation

- Understand that gifted students, just like all students, come to school to learn and be challenged.
- Pre-assess your students. Find out their areas of strength as well as those areas you may need to address before students move on.
- Consider grouping gifted students together for at least part of the school day.
- Plan for differentiation. Consider pre-assessments, extension activities, and compacting the curriculum.
- Use phrases like "You've shown you don't need more practice" or "You need more practice" instead of words like "qualify" or "eligible" when referring to extension work.
- Encourage high-ability students to take on challenges. Because they're often used to getting good grades, gifted students may be risk averse.
- **Definitions of Differentiation Components**:
    - Content – the specific information that is to be taught in the lesson/unit/course of instruction.
    - Process – how the student will acquire the content information.
    - Product – how the student will demonstrate understanding of the content.
    - Learning Environment – the environment where learning is taking place including physical location and/or student grouping

Differentiation occurring in this unit:

Gifted and talented curriculum is structured to offer students additional challenges based on individual needs and interests.

Modifications & Accommodations

Refer to QSAC EXCEL SMALL SPED ACCOMMOCATIONS spreadsheet in this discipline.
Modifications and Accommodations used in this unit:

IEP and 504 accommodations if required.

Benchmark Assessments

Benchmark Assessments are given periodically (e.g., at the end of every quarter or as frequently as once per month) throughout a school year to establish baseline achievement data and measure progress toward a standard or set of academic standards and goals.
Schoolwide Benchmark assessments:
Aimsweb benchmarks 3X a year
Linkit Benchmarks 3X a year
Additional Benchmarks used in this unit:

Formative Assessments

Assessment allows both instructor and student to monitor progress towards achieving learning objectives, and can be approached in a variety of ways. **Formative assessment** refers to tools that identify misconceptions, struggles, and learning gaps along the way and assess how to close those gaps. It includes effective tools for helping to shape learning, and can even bolster students' abilities to take ownership of their learning when they understand that the goal is to improve learning, not apply final marks (Trumbull and Lash, 2013). It can include students assessing themselves, peers, or even the instructor, through writing, quizzes, conversation, and more. In short, formative assessment occurs throughout a class or course, and seeks to improve student achievement of learning objectives through approaches that can support specific student needs (Theal and Franklin, 2010, p. 151).
Formative Assessments used in this unit:

Teacher observation

Discussion

Assignments

Summative Assessments

Summative assessments evaluate student learning, knowledge, proficiency, or success at the conclusion of an instructional period, like a unit, course, or program. Summative assessments are almost always formally graded and often heavily weighted (though they do not need to be). Summative assessment can be used to great effect in conjunction and alignment with formative assessment, and instructors can consider a variety of ways to combine these approaches.
Summative assessments for this unit:

Assignments

Presentations

Projects

Instructional Materials

See materials in Instructional Strategies section above.

Standards

In addition to cross curricular standards listed above, National Association for Gifted Chidren Standards endorsed by NJDOE are applied.