ECT Lesson Plan: Indefinite Articles

Lesson plan at a glance...

Core subject(s) English / Language Arts

Subject area(s) Language

Suggested age 8 to 12 years old

Prerequisites None

Time Preparation: 8 to 15 minutes

Instruction: 25 to 35 minutes

Standards Core Subject: CCSS ELA

CS: CSTA, UK, Australia

In this lesson plan...

- Lesson Overview
- Materials and Equipment
- Preparation Tasks
- The Lesson
- Learning Objectives and Standards
- Additional Information and Resources

Lesson Overview

Students investigate patterns in the usage of 'a' and 'an'. After using **pattern recognition** and **pattern generalization** to study several examples, they explain when to use each of these indefinite articles, and they develop a written **algorithm**. At the completion of this lesson students will be able to test and refine basic algorithms to handle some specific exceptions to a generalized rule.

Materials and Equipment

- □ For the teacher:
 - o Required: Whiteboard and dry-erase markers, or other means of displaying copies of written sentences
- □ For the student:
 - Required: Journal
 - If using Google Docs (http://docs.google.com) or a wiki
 - Internet-connected computer (one (1) computer per student recommended)
 - If not using a computer-based collaboration tool
 - Markers/Whiteboard or Paper and Pen/Pencil
 - Required: One (1) sticky note or index card per student

Preparation Tasks

Display or write three sets of sentences on the board, or prepare printed copies (One set of sentences will be shared for each activity, so they will need to be shared at different times.)	5 to 10 minutes
If students are using computers, confirm that all students' computers are turned on, logged-in, and connected to the Internet	3 to 5 minutes

The Lesson

Warm-up Activity: Journaling	5 minutes
Activity 1: Identifying patterns of indefinite articles	5 to 10 minutes
Activity 2: Creating a more complete algorithm	10 minutes
Wrap-up Activity: Demonstrating knowledge learned	5 minutes

ECT: Indefinite Articles 1 of 5

Warm-up Activity: Journaling (5 minutes)

Activity Overview: In this activity, students explore the key concepts of indefinite articles.

Activity 1: Identifying patterns of indefinite articles (5 to 10 minutes)

Activity Overview: In this activity, students will begin by completing six sentences with indefinite articles. Students will use <u>pattern recognition</u> in the use of 'a' and 'an' and use <u>pattern generalization</u> in writing an <u>algorithm</u>.

Notes to the Teacher:

Students should have a general sense of what 'sounds right' before working through these sentences, but they do not need to know the exact rule for using 'a' and 'an'.

Activity:

Fill in each blank below with 'a' or 'an':

1. I see	elephant.
2. She ate	apple.
3. He read	book.
4. I bought	ice cream cone
5. Michelle	bought dog.
6. We saw	movie.

Q1: Circle the sentences for which you chose 'an'. What do the words that follow 'an' all have in common that make them different from the words that follow 'a'?

Q2: Based on your responses above, write an algorithm that another student could follow to determine when to use 'a' and when to use 'an'.

Assessment:

A1: Numbers 1, 2, and 4 have the word 'an'. The words that follow 'an' all begin with vowels, whereas the words that follow 'a' all begin with consonants.

A2: Wording may vary; however, one possible algorithm is: Look at the word that comes next. If it is a vowel, choose 'an'. If it is a consonant, choose 'a'.

Activity 2: Creating a more complete algorithm (10 minutes)

Activity Overview: In this activity, students will try each other's algorithms and use feedback to improve their original <u>algorithm design</u> so that it works for any exceptions that their partner encounters. They will practice using an algorithm and finding exceptions to an algorithm.

ECT: Indefinite Articles 2 of 5

Notes to the Teacher:

Distinguishing between the two 'u sounds' leads students toward a more complete algorithm. Identifying sounds instead of letters can help them improve the algorithm.

Activity:

Instruct students to follow their partner's algorithm exactly, even if it leads to incorrect results.

Q1: Switch papers with your neighbor and follow her/his algorithm to complete the sentences below with 'a' or 'an'. Follow the algorithm exactly, even if it leads to incorrect answers.

- 1. The teacher tells ____ story.
- 2. The dog chases ____ cat.
- 3. He eats ____ orange.
- 4. I waited for ____ hour.
- 5. She is carrying ____ umbrella.
- 6. I saw a picture of ____ unicorn.

Q2: Switch papers back so that you have your own paper again and read through your neighbor's answers to numbers 1-6 above. Circle any sentences in which your neighbor followed your algorithm but ended up with an incorrect-sounding sentence.

Q3: In numbers 5 and 6 above, the nouns 'umbrella' and 'unicorn' both start with the letter 'u', yet in one case we say 'a' and in the other case we say 'an'. In the word 'umbrella', what sound does the letter 'u' make? In the word 'unicorn' what sound does the letter 'u' make?

Q4: Say the word 'hour' out loud. What is the first sound you hear? Spell it out as best makes sense to you. Modify your original algorithm to account for any exceptions to the general rule for using 'a' and 'an'.

Q5: Of the words hour, umbrella, and unicorn, which begin with a vowel sound?

Q6: If your original algorithm did not work for these two words, rewrite it so that it accounts for such exceptions.

Assessment:

A1: 1 - a; 2 - a; 3 - an; 4 - a, 5 - an; 6 - a

A2: Answers will vary, however many students may notice that their algorithm does not work well for numbers 4 and 6 above.

A3: umbrella - 'uh'; unicorn - 'you'

A4: Hour begins with the 'aou' sound. Even though the first letter of the word is a consonant, the first sound is a vowel sound.

A5: Hour and umbrella begin with vowel sounds.

A6: Answers may vary, however a sample algorithm could read as follows: Look at the word that comes next. If it begins with a vowel sound, choose 'an'. If it begins with a consonant sound, choose 'a'.

ECT: Indefinite Articles 3 of 5

Wrap-up Activity: Testing understanding of the algorithm (5 minutes)

Activity Overview: In this activity, students will finish the lesson by demonstrating their understanding of how to choose the correct indefinite article, as well as how to define the algorithm.

Activity:

<u>Help Write the Test</u>: Students conclude the lesson by writing possible test questions for this lesson. They should write a question on one side of a card or sticky-note and its answer on the other side. (Questions could be in the form of sentences with the indefinite articles left blank and/or parts of the algorithm with key words left blank.)

Learning Objectives and Standards

Learning Objectives	Standards	
LO1: Students will be able to recognize patterns in the correct choice of indefinite articles.	Core Subject CCSS ELA.LITERACY.L1.1H: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	
	Computer Science AUSTRALIA 4.4 (Creating digital solutions by: defining): Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them	
	CSTA L1:6.CT.1: Understand and use the basic steps in algorithmic problem-solving (e.g., problem statement and exploration, examination of sample instances, design, implementation and testing).	
	UK 2.3: Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	
LO2: Students will be able to follow another student's written algorithm using specified test cases.	Computer Science AUSTRALIA 4.4 (Creating digital solutions by: defining): Define simple problems, and describe and follow a sequence of steps and decisions (algorithms) needed to solve them	
	CSTA L1:6.CT.2: Develop a simple understanding of an algorithm (e.g., search, sequence of events or sorting) using computer-free exercises.	
LO3: Students will be able to design and refine an algorithm in response to feedback from testing.	Computer Science AUSTRALIA 4.4 (Creating digital solutions by: defining)	
	<u>CSTA L1:6.CT.2</u>	

Additional Information and Resources

Lesson Vocabulary

Term	Definition	For Additional Information
Indefinite Article	"A" and "an," which signal that the noun modified is indefinite, referring to <i>any</i> member of a group.	https://owl.english.purdue.edu/owl/resource/540/01/

ECT: Indefinite Articles 4 of 5

Computational Thinking Concepts

Concept	Definition	Location
Algorithm Design	Creating an ordered series of instructions for solving similar problems	Activity 1
Pattern Generalization	Creating models of observed patterns to test predicted outcomes	Activity 1
Pattern Recognition	Breaking down data, processes or problems into smaller, manageable parts	Activity 1

Administrative Details

Contact info For more info about Exploring Computational Thinking (ECT), visit the ECT website (<u>g.co/exploringCT</u>)

Credits Developed by the Exploring Computational Thinking team at Google and reviewed by K-12 educators

from around the world.

Last updated on 07/01/2015

Copyright info Except as otherwise <u>noted</u>, the content of this document is licensed under the <u>Creative Commons</u>

Attribution 4.0 International License, and code samples are licensed under the Apache 2.0 License.

ECT: Indefinite Articles 5 of 5