

AI for Connectivity Hackathon

Team Gamez

Teacher's Helper

Connecting teaching resources
to teachers and students.

lab
lab
ai





Lesson Plan

Generate a lesson plan for a topic or objective you’re teaching.

Grade level: *

6th grade

▼

Topic, Standard, or Objective: *

🎤

How do food webs describe the ways in which animals in an ecosystem are related?

📎

Additional Criteria:

🎤

This lesson will be an introductory lesson where students are being introduced to the roles that particular organisms play in an ecosystem, including producers, primary consumers, secondary consumers and decomposers.

📎

✦ Get Help With Prompt

Standards Set to Align to:

🎤

NGSS

📎

Generate

Exploring Food Webs in Ecosystems

Objective:

Students will be able to describe how food webs depict the relationships between animals in an ecosystem, including the roles of producers, primary consumers, secondary consumers, and decomposers.

Assessment:

At the end of the lesson, students will complete a worksheet where they identify the different organisms in a food web and label them as producers, primary consumers, secondary consumers, or decomposers.

Key Points:

- Food webs are diagrams that show the feeding relationships between organisms in an ecosystem.
- Producers, such as plants, use sunlight to make their own food through photosynthesis.
- Primary consumers, such as herbivores, eat the producers.
- Secondary consumers, such as carnivores, eat the primary consumers.
- Decomposers, such as bacteria and fungi, break down dead organisms and waste, returning nutrients to the ecosystem.

Opening:

- Begin the lesson by showing students a picture of a food web and ask them to identify the different organisms in the web.
- Engage students in a discussion about how they think the organisms in the web are related to each other.

Introduction to New Material:

- Provide students with a definition of a food web and explain its purpose in representing the relationships between organisms in an ecosystem.
- Show examples of different organisms and ask students to identify whether they are producers, primary consumers, secondary consumers, or decomposers.
- Address the misconception that animals can only be part of one food chain and emphasize the interconnectedness of organisms in a food web.

Guided Practice:

- Divide students into small groups and provide them with food web diagrams.
- Ask students to identify the different organisms in the food web and label them according to their roles as producers, primary consumers, secondary consumers, or decomposers.
- Circulate throughout the classroom, monitoring student performance and providing guidance and support as needed.

Independent Practice:

- Distribute the worksheet to each student.
- Instruct students to identify and label the organisms in the given food web diagram.
- Encourage students to refer back to the key points discussed earlier in the lesson.
- Set clear behavioral expectations for the independent practice time.

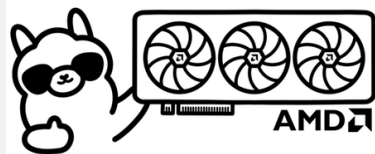
Existing Connectors

Search connectors...

Collapse All

<div><div>File</div><div>Total Connectors1Active Connectors1 (100%)Total Docs Indexed1</div></div>			
Name	Last Indexed	Activity	Total Docs
K-12-CS-Framework by grade band	15 hours ago	Active	1

<div><div>Web</div><div>Total Connectors3Active Connectors3 (100%)Total Docs Indexed724</div></div>			
Name	Last Indexed	Activity	Total Docs
Khan Academy	15 hours ago	Active	123
Code.org	15 hours ago	Active	175
CS unplugged	15 hours ago	Active	426



(2c) We send the docs + query to an LLM to generate an answer. The answer, quotes and relevant docs are then returned to the user.

Docker Running on a VM or Kubernetes Cluster



(3a) Document syncing is run in the background. We first check Postgres to see if any connectors are scheduled to be synced.

**BACKGROUND
TASK QUEUE
(Celery)**

(3b) For every connector scheduled, we fetch updates from the app itself. After processing and embedding, the docs are stored in Vespa

(2b) We fetch relevant documents from Vespa

**VESPA
(Vector DB +
Search Engine)**

**API SERVER
(FastAPI)**

(2a) When the user submits a query, it's routed to the API Server to be embedded

**POSTGRES
(Manages users,
permissions, etc.)**

**WEB SERVER
(NextJS)**

NGINX

(1) On initial page visit, we hit the web server for the HTML, JavaScript, and CSS to display the web-page.



Your Apps

CONFLUENCE

GOOGLE DRIVE

GITHUB

etc...