

Energy Pyramid Levels Cipher Puzzle

- Students solve problems to discover a secret message
- NO PREP, NO MARKING, NO MATERIALS

Energy Pyramid Levels Cipher Puzzle

Instructions: Read each energy clue and identify the energy pyramid level, consumer type, or energy flow term. Use the Energy Pyramid Cipher Key to find the open/closed number form that contains the number in order using the chart below. If 1, 8, 15, 16, 19, 22, or 25, add an "L" after the letter number and add spaces to reveal the hidden message.

Energy Pyramid Levels Cipher Key

Role/Term	Number	Role/Term	Number	Role/Term	Number
First trophic level	5	Top of pyramid	15	Base of pyramid	4
Second trophic level	14	Energy decreases	16	Energy loss	12
Third trophic level	18	Energy transfer	19	10% energy rule	8
Fourth trophic level	22	Most energy	1	Energy pyramid	25
Tertiary consumer	7	Least energy	3		

Student Questions

#	Clue	Role/Term	Cipher Number	Letter
1	A grass plant at the bottom of an energy pyramid makes its own food. Which trophic level is it?	First trophic level	5	E
2	A grasshopper eats grass. What trophic level is the grasshopper in?	Second trophic level	14	N

Hidden Message

Students use clues to answer questions and their answers reveal a hidden message.

Energy Pyramid Levels Cipher Key

Role/Term	Number	Role/Term	Number	Role/Term	Number
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Student Questions

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1	A grass plant at the bottom of an energy pyramid makes its own food. Which trophic level is it?	First trophic level	5	E
2	A grasshopper eats grass. What trophic level is the grasshopper in?	Second trophic level	14	N

SCROLL to take a look inside!

NO PREP, MATERIALS, OR MARKING

HOW THESE ACTIVITIES HELP YOU

- **Saves Prep Time** - Everything is pre-made, ready to go, and fully editable.
- **Provides Built-In Assessments** - The activity lets students self-assess and lets you quickly check for understanding.
- **Perfect for:** Review, Practice, Homework, and more!

MULTIPLE QUESTION TYPES THAT CHECK FOR UNDERSTANDING

Example

Energy Pyramid Levels Cipher Key					
Word/Term	Number	Word/Term	Number	Word/Term	Number
First trophic level	5	Top of pyramid	15	Base of pyramid	4
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Tertiary consumer	7	Least energy	3		

Student Questions				
#	Clue	Word/Term	Cipher Number	Letter
1	A grass plant at the bottom of an energy pyramid makes its own food. Which trophic level is it?	First trophic level	5	E
2	A grasshopper eats grass. What trophic level is the grasshopper in?	Second trophic level	14	N

Full Teacher Answer Key

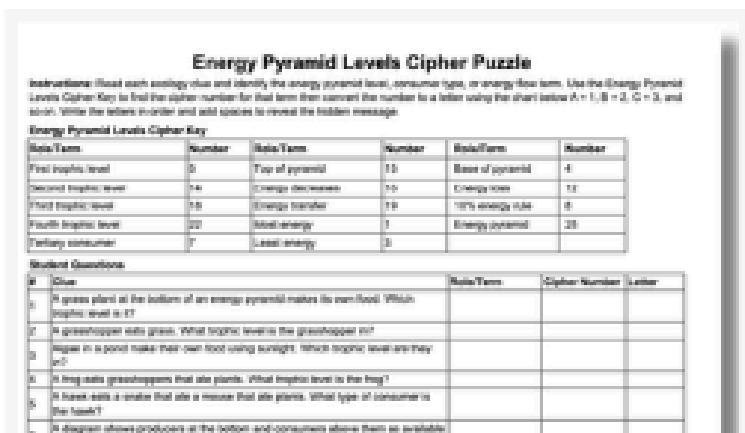


Energy Pyramid Levels Cipher Puzzle - Answer Key				
#	Clue	Correct Word/Term	Cipher Number	Letter
1	A grass plant at the bottom of an energy pyramid makes its own food. Which trophic level is it?	First trophic level	5	E
2	A grasshopper eats grass. What trophic level is the grasshopper in?	Second trophic level	14	N
3	Algae in a pond make their own food using sunlight. Which trophic level are they in?	First trophic level	5	E
4	A frog eats grasshoppers that ate plants. What trophic level is the frog?	Third trophic level	18	R
5	A hawk eats a snake that ate a mouse that ate plants. What type of consumer is the hawk?	Tertiary consumer	7	Q
6	A diagram shows producers at the bottom and consumers above them as available energy decreases upward. What is this diagram called?	Energy pyramid	25	Y
7	Where are producers usually found in an energy pyramid?	Base of pyramid	4	D
8	A fox eats a rabbit that ate grass. What trophic level is the fox?	Third trophic level	18	R
9	In an energy pyramid, where are top predators usually found?	Top of pyramid	15	O
10	As energy moves upward from producers to consumers, what happens to the amount of available energy?	Energy decreases	16	P
11	The movement of energy from one organism to another as one organism eats another is called what?	Energy transfer	19	T
12	Phytoplankton form the bottom of an ocean energy pyramid. Which trophic level are they in?	First trophic level	5	E
13	Which cipher key term describes the amount of available energy found at the base of an energy pyramid?	Most energy	1	A
14	Which cipher key term describes the amount of available energy usually found at the top of an energy pyramid?	Least energy	3	C
15	About 10% of energy is passed from one trophic level to the next. What is this called?	10% energy rule	8	H
16	Energy released as heat or used for movement and life processes is not passed to the next level. What is this called?	Energy loss	12	L

Students Use Clues to Answer Questions. Their Answers Reveal a Hidden Message.

What Will Your Students Learn?

SIMPLY DOWNLOAD AND
GIVE TO YOUR STUDENTS



- ✓ Full Answer Key
- ✓ No Prep, Just Print
- ✓ Perfect for

- Review
- Practice
- Additional work for early finishers

NO PREP or Materials

- Producers in an energy pyramid
- First, second, third, and fourth trophic levels
- Primary, secondary, and tertiary consumers
- Energy transfer between organisms
- Energy loss as heat and through life processes
- The 10% energy rule
- Why less energy is available at higher trophic levels
- Why top predators are usually found at the top of an energy pyramid

- **Energy Pyramid Levels Cipher Puzzle Worksheet**
- A student-friendly activity with 20 clues focused on identifying levels and energy flow terms in an energy pyramid.
- **Clear Instructions**
 - Students read each clue, identify the correct energy pyramid level or term, use the cipher key to find the number, and convert it to a letter to decode a hidden message.
- **Reinforces:**
 - Energy pyramid levels
 - First, second, third, and fourth trophic levels
 - Producers, consumers, and tertiary consumers
 - Energy transfer through ecosystems
 - Energy loss between trophic levels
 - Most energy vs. least energy in a pyramid
 - Food chains and food web vocabulary
- **Includes answer key and number-to-letter conversions**
- **No-Prep Resource**
 - Ready to print or assign digitally for review, practice, early finishers, stations, homework, or sub plans.

What You Get

Students Use Their Answers to Reveal a Hidden Message

1. For each clue, write the answer in the 'Answer' column.

2. Identify the letter to be extracted using the "Letter position" column.

3. Write the letter in the 'Letter extracted from Answer' column.

4. Write your letters in order below the table to reveal the hidden message.

Energy Pyramid Levels Cipher Puzzle

Directions: Read each clue, identify the correct energy pyramid level or term, use the cipher key to find the number, and convert it to a letter to decode a hidden message.

Clue	Answer	Letter position	Letter extracted from Answer
1. A green plant at the bottom of an energy pyramid makes its own food. What trophic level is it?			
2. A grasshopper eats grass. What trophic level is the grasshopper?			
3. A hawk eats a snake that ate a frog. What trophic level is the hawk?			
4. A fox eats a rabbit that ate a plant. What trophic level is the fox?			
5. A snake eats a frog that ate a grasshopper. What trophic level is the snake?			
6. A diagram shows producers at the bottom and consumers above them. As available energy decreases upward, what is this diagram called?			
7. Energy is lost between trophic levels in an energy pyramid. What is this loss called?			
8. A hawk eats a snake that ate a frog that ate a grasshopper. What trophic level is the hawk?			
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20. A hawk eats a snake that ate a frog that ate a grasshopper. What trophic level is the hawk?			

Energy Pyramid Levels Cipher Puzzle - Answer Key

Clue	Answer	Letter position	Letter extracted from Answer
1. A green plant at the bottom of an energy pyramid makes its own food. What trophic level is it?	First trophic level	5	E
2. A grasshopper eats grass. What trophic level is the grasshopper?	Second trophic level	14	G
3. A hawk eats a snake that ate a frog. What trophic level is the hawk?	Third trophic level	5	E
4. A fox eats a rabbit that ate a plant. What trophic level is the fox?	Third trophic level	18	H
5. A snake eats a frog that ate a grasshopper. What trophic level is the snake?	Third trophic level	18	H
6. A diagram shows producers at the bottom and consumers above them. As available energy decreases upward, what is this diagram called?	Energy pyramid	20	L
7. Energy is lost between trophic levels in an energy pyramid. What is this loss called?	Energy loss	17	O
8. A hawk eats a snake that ate a frog that ate a grasshopper. What trophic level is the hawk?	Third trophic level	18	H
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Hidden Message: EARTH IS OUR HOME. WE MUST PROTECT IT.

Classroom Fit Guarantee

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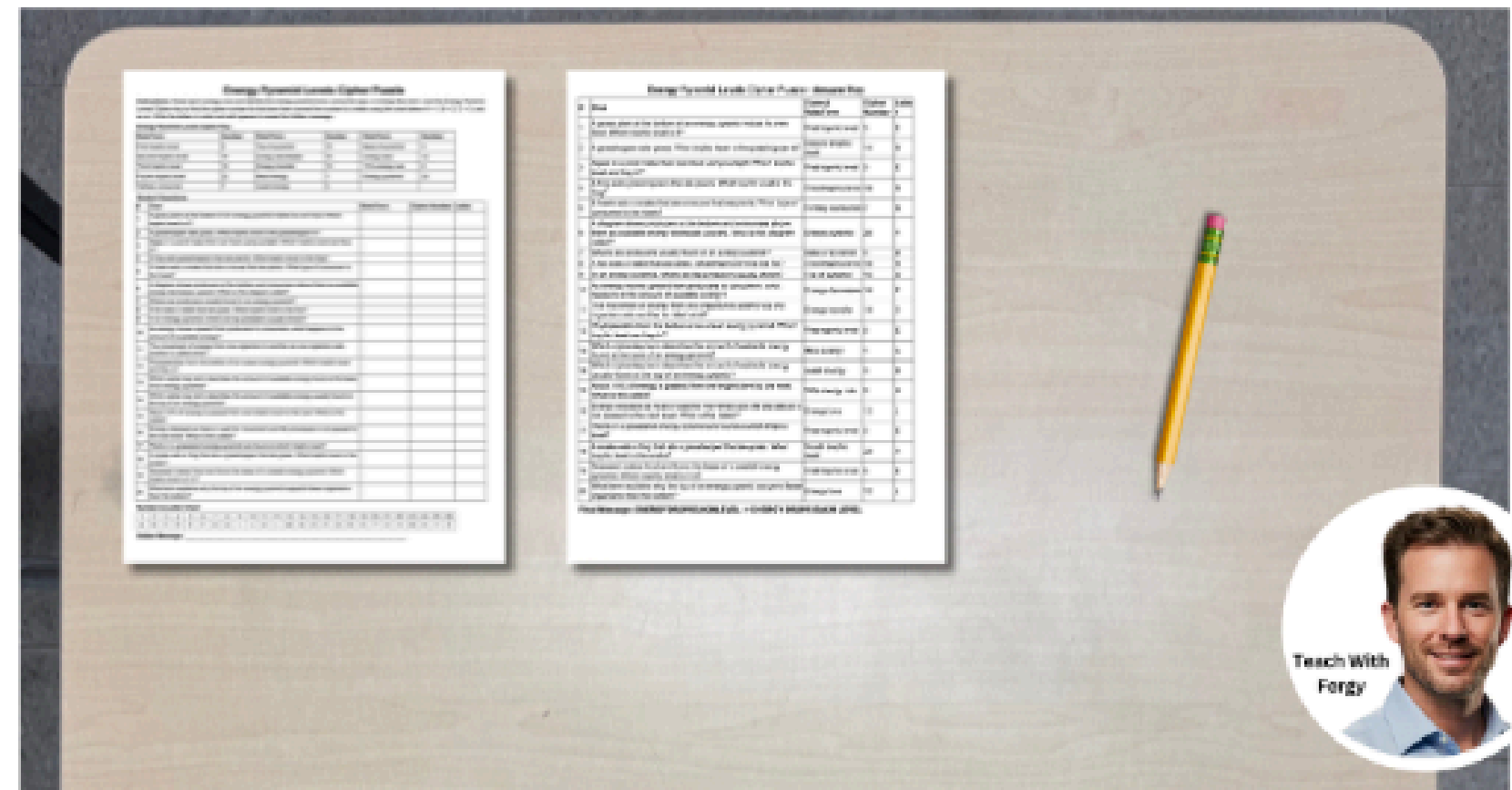
Your Activity

- Is a fun and interactive way to reinforce concepts and study
- **DIGITAL** and **PRINT** ready
- **FULLY EDITABLE**
- Complete Answer Key



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Thanks
**for your interest
in this resource!**

I am a real person and if
you have any questions,
suggestions, or concerns,
please reach out.



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TWF

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*Let's
Connect!*



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Ionic and Molecular Compounds Cipher Puzzle

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Periodic Table Element Cipher Puzzle

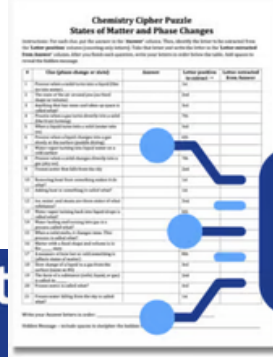
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States of Matter and Phase Change Cipher Puzzle

- Students solve problems to discover a secret message
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Types of Equations Balancing Cipher Puzzle

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NO PREP, MATERIALS, OR MARKING

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- Students solve problems to discover a secret message
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