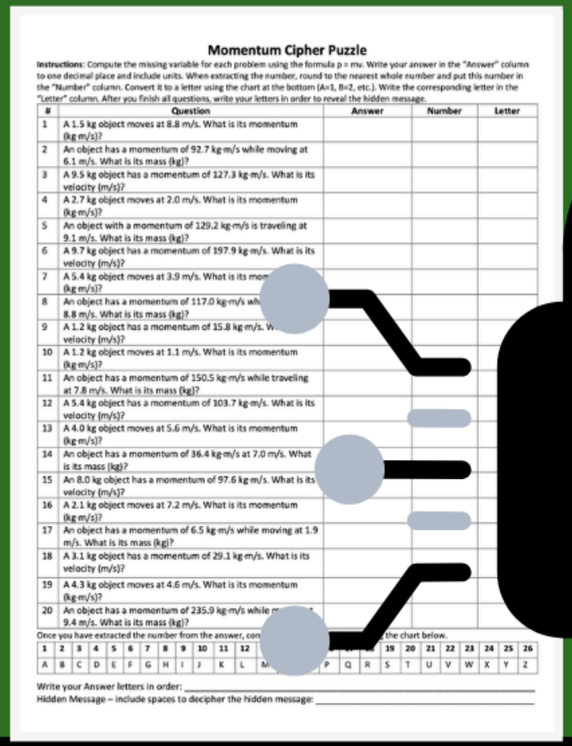
Physics - Force, Motion, & Energy Cipher Puzzle Bundle

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



Momentum Cipher Puzzle

Instructions: Compute the missing variable for each problem using the formula p = mv. Write your answer in the "Answer" column to one decimal place and include units. When extracting the number, round to the nearest whole number and put this number in the "Number" column. Convert it to a letter using the chart at the bottom (A=1, B=2, etc.). Write the corresponding letter in the "Letter" column. After you finish all questions, write your letters in order to reveal the hidden message.

#	Question	Answer	Number	Letter
1	A 1.5 kg object moves at 8.8 m/s. What is its momentum (kg·m/s)?			
2	An object has a momentum of 92.7 kg·m/s while moving at 6.1 m/s. What is its mass (kg)?			
3	A 9.5 kg object has a momentum of 127.3 kg·m/s. What is its velocity (m/s)?			
4	A 2.7 kg object moves at 2.0 m/s. What is its momentum (kg·m/s)?			
5	An object with a momentum of 129.2 kg·m/s is traveling at 9.1 m/s. What is its mass (kg)?			
6	A 9.7 kg object has a momentum of 197.9 kg·m/s. What is its velocity (m/s)?			
7	A 5.4 kg object moves at 3.9 m/s. What is its mo… (kg·m/s)?			
8	An object has a momentum of 117.0 kg·m/s wh… 8.8 m/s. What is its mass (kg)?			
9	A 1.2 kg object has a momentum of 15.8 kg·m/s. W… velocity (m/s)?			
10	A 1.2 kg object moves at 1.1 m/s. What is its momentum (kg·m/s)?			
11	An object has a momentum of 150.5 kg·m/s while traveling at 7.8 m/s. What is its mass (kg)?			
12	A 5.4 kg object has a momentum of 103.7 kg·m/s. What is its velocity (m/s)?			
13	A 4.0 kg object moves at 5.6 m/s. What is its momentum (kg·m/s)?			
14	An object has a momentum of 36.4 kg·m/s at 7.0 m/s. What is its mass (kg)?			
15	An 8.0 kg object has a momentum of 97.6 kg·m/s. What is its velocity (m/s)?			
16	A 2.1 kg object moves at 7.2 m/s. What is its momentum (kg·m/s)?			
17	An object has a momentum of 6.5 kg·m/s while moving at 1.9 m/s. What is its mass (kg)?			
18	A 3.1 kg object has a momentum of 29.1 kg·m/s. What is its velocity (m/s)?			
19	A 4.3 kg object moves at 4.6 m/s. What is its momentum (kg·m/s)?			
20	An object has a momentum of 235.9 kg·m/s while m… 9.4 m/s. What is its mass (kg)?			

Once you have extracted the number from the answer, con… the chart below.

1	2	3	4	5	6	7	8	9	10	11	12	…	19	20	21	22	23	24	25	26
A	B	C	D	E	F	G	H	I	J	K	L	M	…	P	Q	R	S	T	U	V	W	X	Y	Z

Write your Answer letters in order: _____

Hidden Message – include spaces to decipher the hidden message: _____

NO PREP, MATERIALS, OR MARKING

Students answer questions then use a simple number to letter cipher to reveal a hidden message.

#	Question	Answer	Number	Letter
1	A 1.5 kg object moves at 8.8 m/s. What is its momentum (kg·m/s)?	13.2 kg·m/s	13	M
2	An object has a momentum of 92.7 kg·m/s while moving at 6.1 m/s. What is its mass (kg)?	15.2 kg	15	O

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

SCROLL
to take a look inside!

HOW THESE ACTIVITIES HELP YOU

- **This bundle includes many different physics concepts, from average velocity and acceleration to kinetic energy, gravitational potential energy, and momentum.**
- Saves Prep Time – Everything is pre-made, ready to go, and easy to assign.
- **Provides Built-In Assessments – The activities let students self-check through the cipher format while also helping you quickly check for understanding.**
- Perfect for: Review, practice, homework, stations, early finishers, and sub plans.

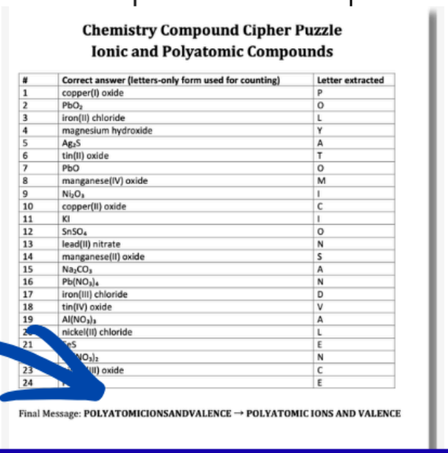
MULTIPLE QUESTION TYPES THAT CHECK FOR UNDERSTANDING

Example

#	Question	Answer - Write the name if given the formula and formula if given the name	Letter position to extract →	Letter extracted from Answer
1	NaI	sodium iodide (SODIUMIODIDE)	7th	I
2	MgO	magnesium oxide	10th	O

Full Teacher Answer Key





Chemistry Compound Cipher Puzzle
Ionic and Polyatomic Compounds

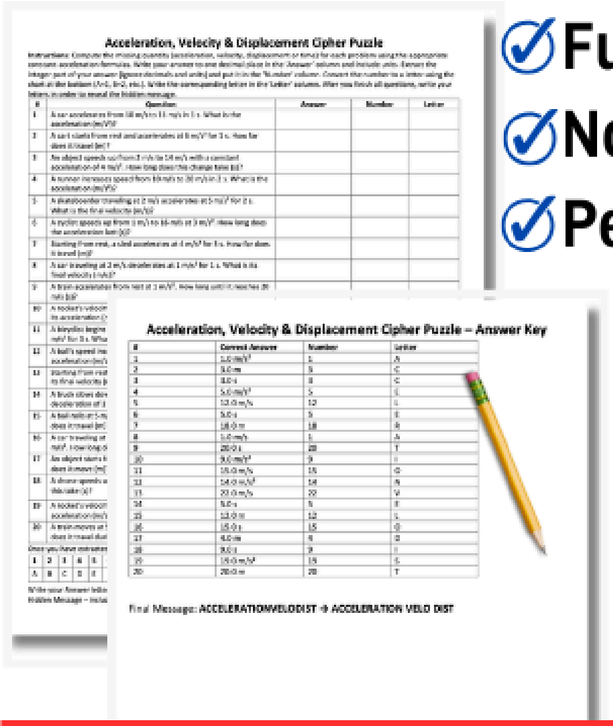
#	Correct answer (letters-only form used for counting)	Letter extracted
1	copper(I) oxide	P
2	PbO_2	O
3	iron(II) chloride	L
4	magnesium hydroxide	Y
5	Ag_2S	A
6	tin(II) oxide	T
7	PbO	O
8	manganese(IV) oxide	M
9	Ni_2O_3	I
10	copper(II) oxide	C
11	KI	I
12	$SnSO_4$	O
13	lead(II) nitrate	N
14	manganese(II) oxide	S
15	Na_2CO_3	A
16	$Pb(NO_3)_4$	N
17	iron(III) chloride	D
18	tin(IV) oxide	V
19	$Al(NO_3)_3$	A
20	nickel(II) chloride	L
21	[illegible]S	E
22	[illegible]$(NO_3)_3$	N
23	[illegible](II) oxide	C
24	[illegible]	E

Final Message: POLYATOMICIONSANDVALENCE → POLYATOMIC IONS AND VALENCE

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

What Will Your Students Learn?

SIMPLY DOWNLOAD AND GIVE TO YOUR STUDENTS


Acceleration, Velocity & Displacement Cipher Puzzle

Instructions: Compute the missing quantity (acceleration, velocity, displacement or time) for each problem using the appropriate constant acceleration formulas. Write your answer to one decimal place in the "Answer" column and include units. Extract the integer part of your answer (ignore decimals and units) and put it in the "Number" column. Convert that number to a letter using the chart at the bottom (A=1, B=2, etc.). Write the corresponding letter in the "Letter" column. After you finish all questions, write your letters in order to reveal the hidden message.

#	Question	Answer	Number	Letter
1	A car accelerates from 10 m/s to 11 m/s in 1 s. What is the acceleration (m/s²)?			
2	A car starts from rest and accelerates at 8 m/s² for 3 s. How far does it travel (m)?			
3	An object speeds up from 3 m/s to 14 m/s with a constant acceleration of 4 m/s². How long does this change take (s)?			
4	A runner increases speed from 6 m/s to 10 m/s in 2 s. What is the acceleration (m/s²)?			
5	A skateboarder traveling at 2 m/s accelerates at 5 m/s² for 2 s. What is the final velocity (m/s)?			
6	A cyclist speeds up from 3 m/s to 16 m/s at 3 m/s². How long does the acceleration last (s)?			
7	Starting from rest, a sled accelerates at 4 m/s² for 5 s. How far does it travel (m)?			
8	A car traveling at 2 m/s accelerates at 1 m/s² for 1 s. What is its final velocity (m/s)?			
9	A train accelerates from rest at 3 m/s². How long until it reaches 30 m/s (s)?			
10	A rocket's velocity increases from 0 m/s to 100 m/s in 10 s. What is its acceleration (m/s²)?			
11	A bicycle begins at 0 m/s and accelerates at 2 m/s² for 3 s. What is its final velocity (m/s)?			
12	A ball's speed increases from 5 m/s to 25 m/s in 4 s. What is the acceleration (m/s²)?			
13	A truck slows down from 20 m/s to 0 m/s with a deceleration of 5 m/s². How far does it travel (m)?			
14	A ball rolls at 5 m/s for 6 s. How far does it travel (m)?			
15	A car traveling at 10 m/s accelerates at 2 m/s² for 5 s. How far does it travel (m)?			
16	A rocket's velocity increases from 0 m/s to 200 m/s in 20 s. What is its acceleration (m/s²)?			
17	An object starts from rest and accelerates at 3 m/s² for 4 s. How far does it travel (m)?			
18	A drone speeds up from 4 m/s to 16 m/s at a rate of 3 m/s². How long does this take (s)?			
19	A rocket's velocity increases from 0 m/s to 150 m/s in 15 s. What is its acceleration (m/s²)?			
20	A train moves at 10 m/s and accelerates at 2 m/s² for 10 s. How far does it travel (m)?			

Once you have entered your answers, write the letters in order to reveal the hidden message.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T

Write your answer below:

Hidden Message – Instructions:

Acceleration, Velocity & Displacement Cipher Puzzle – Answer Key

#	Correct Answer	Number	Letter
1	1.0 m/s²	1	A
2	36.0 m	3	C
3	11.0 s	11	K
4	2.0 m/s²	2	B
5	12.0 m/s	12	L
6	5.0 s	5	E
7	18.0 m	18	R
8	3.0 m/s	3	C
9	20.0 s	20	T
10	9.0 m/s²	9	I
11	15.0 m/s	15	O
12	14.0 m/s²	14	N
13	20.0 m/s	20	V
14	5.0 s	5	E
15	12.0 m	12	L
16	15.0 s	15	O
17	48.0 m	8	H
18	3.0 s	3	C
19	10.0 m/s²	10	J
20	200.0 m	20	T

Final Message: ACCELERATIONVELOCITY → ACCELERATION VELO DIST

- ☑ Full Answer Key
- ☑ No Prep, Just Print
- ☑ Perfect for
  - Review
  - Practice
  - Additional work for early finishers

NO PREP or Materials

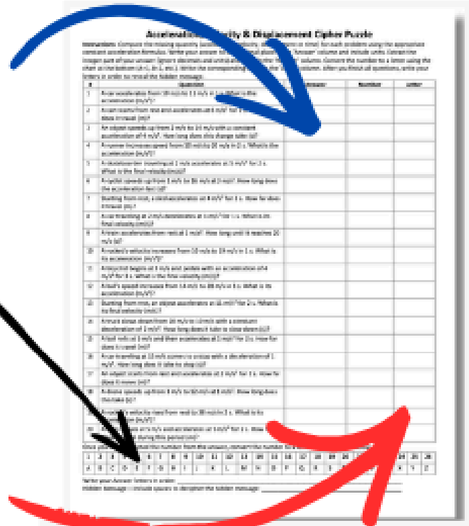
- **Motion, velocity, acceleration, and displacement**
- Energy, work, and momentum
- **How to apply physics formulas to solve for missing variables**
- How to use formulas and problem-solving skills in different directions
- **Forces, pressure, springs, waves, and other core physics concepts**
- How to strengthen physics vocabulary, calculations, and conceptual understanding

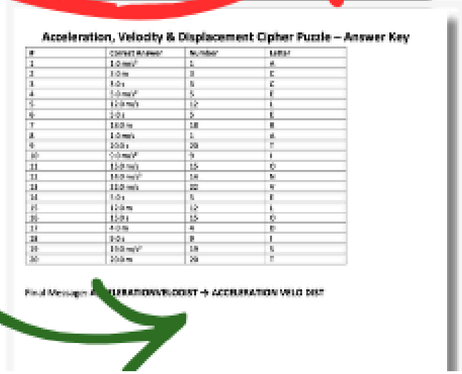
What You Get

- **A collection of student-friendly physics cipher activities designed to reinforce key physics concepts through puzzle-based practice**
- Students solve each clue and extract numbers or letters to decode a hidden message.
- **Reinforces**:
  - Physics formulas and calculations
  - Motion, velocity, acceleration, and displacement
  - Energy, momentum, and other core physics concepts
  - Problem-solving skills
  - Patterns, logic, and critical thinking
- Students use their answers to decode a hidden message
- Includes all physics ciphers
- Full answer key includes all correct answers and extracted letters
- No-Prep Resource
  - Ready to print or assign digitally for review, practice, or sub plans.

Students Use Their Answers to Reveal a Hidden Message

1. For each clue, write the answer in the ‘Answer’ column.
2. Convert the number to the letter using the chart.
3. Write the deciphered letter in the ‘Letter’ column.
4. Write your letters in order below the table to reveal the hidden message.



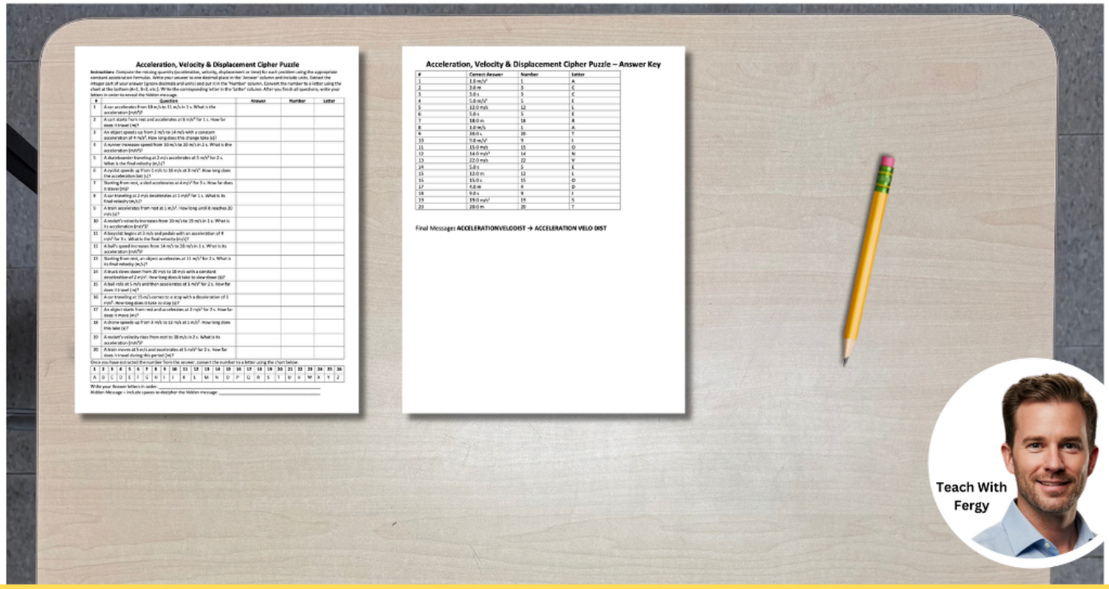


Your Activities

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

Physics - Force, Motion, & Energy Cipher Puzzle Bundle

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



NO PREP, MATERIALS, OR MARKING

thanks

for your interest in this resource!

Teach With Fergy

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

Let's Connect!



devon@teachwithfergy.com