

FAQ

How long does this activity take to complete?

It really depends on a lot of things. Estimated completion time is based on the students' puzzle solving experience, decoding skills, critical thinking skills, age and group size. Some students may NOT "breakout" and that is OK!! They still had fun while learning! The first time always takes much longer than the next since it is the first time they are seeing these types of puzzles. Once they understand how to decode the puzzles, the next time you choose to do an activity like this goes much quicker.

How many students can play at once?

As many as you want! Personally, I prefer to let them work on their own or with a partner, however, you can play in small groups as well! If you are working in small groups, the completion time will be much quicker. In the event that you are running out of class time, you can always pair students up to compare answers and get done faster.

How do I set up the Breakout?

To set-up the Breakout, you simply need to print and play! It's that easy! Everything you need is included in your download. You will need to hang the six printed decoders around the room.

Do I need locks, envelopes or special equipment?

NOT AT ALL! This was created to make your life easier! You don't need any locks, envelopes or special equipment. No silly envelopes to stuff! No odd shapes to cut out!

What if my students get stuck on one of the decoders?

First off, let them think for a bit! This is where critical thinking skills come in. If you have a student truly struggling, show them the Hint Card for that puzzle. This will provide them with directions for each decoder. Please do NOT hang the Hint Cards up or hand them out to all students...that takes away the element of fun and that special "AHA" moment.

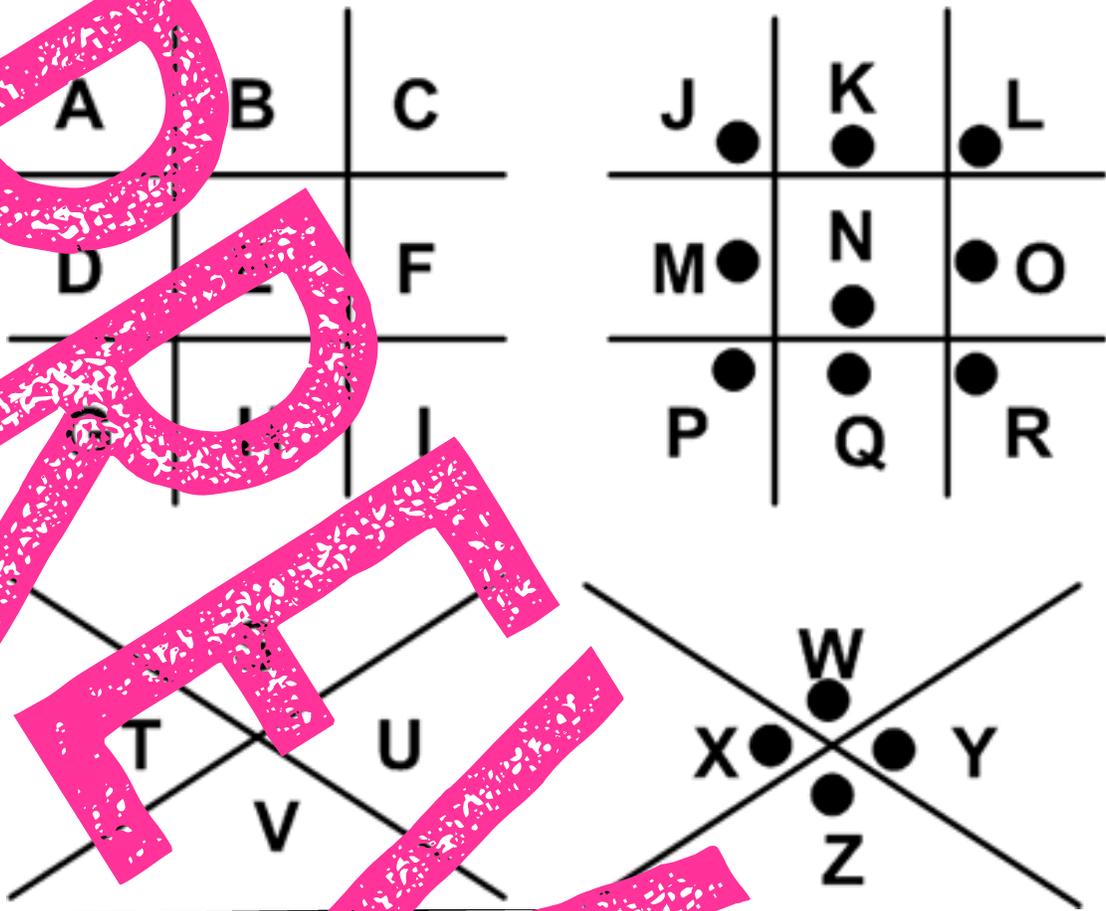
Where do students start?

It does NOT matter the order in which they visit each puzzle station. I often tell my students to go to the station with the least students around it. Students will work at different paces, and a few may finish earlier than others. A word search is included for your early finishers. The words to "find" in the word search are the answers they decoded at each puzzle station.

Will students have to decode every single answer?

Most likely, the answer is no if they already have some background knowledge on the topic.

CIPHER DECODER



- 1 The Moon is the Earth's largest _____.

V J > □ □ • □ □ > □
- 2 As the Moon travels around the Earth it forms an _____, not a perfect circle.

□ □ • □ □ □ □ □ □
- 3 The shape of the Moon that is visible from Earth is called a _____.

□ □ • □ □ □ □ □ □

QWERTY DECODER

ONLY use the letter buttons. The other buttons that do not include a single alphabet letter do not count.



Example: 3-7 = M

Example: 1-4 = R

10

During the Waxing Gibbous, the moon is heading toward the East by about _____ degrees per day.

1-5, 1-2, 1-3, 2-1, 3-4, 1-3

11

A Full Moon looks very bright in the night sky and happens about every _____ days.

1-5, 2-6, 1-8, 1-4, 1-5, 1-5

12

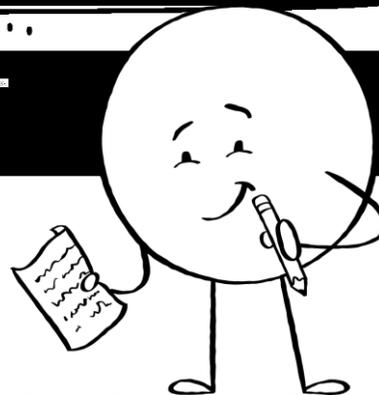
A rare but possible second Full Moon in one month is called a "_____ moon".

3-5, 2-9, 1-7, 1-3

NAME: _____

RECORDING SHEET

Decode the puzzles and write your answers in the grid. Once all puzzles have been completed, unscramble the letters in the gray shaded boxes. DO NOT leave a space between words if the answer is more than one word.



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| 2. | | | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | | | |
| 5. | | | | | | | | | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | | | |
| 11. | | | | | | | | | | | | | | | | | | | |
| 12. | | | | | | | | | | | | | | | | | | | |
| 13. | | | | | | | | | | | | | | | | | | | |
| 14. | | | | | | | | | | | | | | | | | | | |
| 15. | | | | | | | | | | | | | | | | | | | |
| 16. | | | | | | | | | | | | | | | | | | | |
| 17. | | | | | | | | | | | | | | | | | | | |
| 18. | | | | | | | | | | | | | | | | | | | |

UNSCRAMBLE

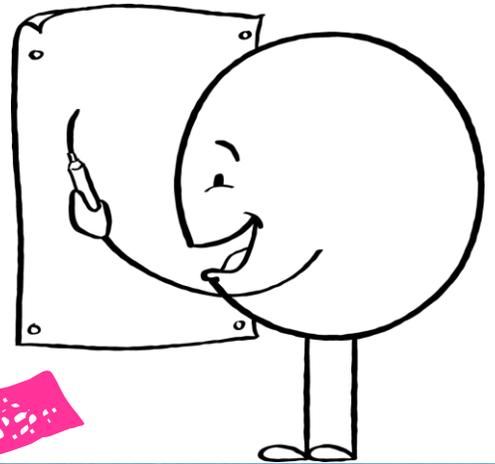


CIPHER HINT

Use the Cipher DECODER to find the SHAPE that relates to your answer and determine the letter it represents.

Example: **E** would be the letter **E** and **D** would be the letter **D**.

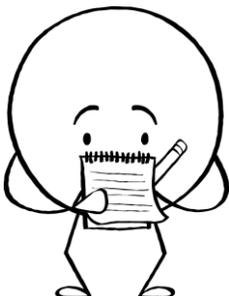
This is the hardest puzzle, stay focused!



QWERTY HINT

To solve the code, use the Qwerty DECODER to determine which letter each number combination represents.

Only use buttons on the keyboard with a single alphabet number. Do not count the other buttons.



Example: 3578
(The letter **B** can be found on row 3 of letters, 5th letter over)

CONGRATULATIONS

YOU BROKE
THE CODES!



NAME:

CONGRATULATIONS

YOU BROKE
THE CODES!



NAME:

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