



Layers of the



Atmosphere Mania Game

Game Rules:

(1) You must solve whatever card you pick! Teams are not allowed to peek at the problem before choosing to take the card.

(2) Your team can only work on one card at a time! Teams must finish a card and have the correct answer before choosing another card.

Directions:

One team member picks a card and brings it back to the team. The entire team solves the problem together and agrees on the answer. Write the answer in a box below. Then have a team member take it up to the teacher and have the teacher check it. If the answer is correct, your team member turns the card in and picks another card. If not, keep trying until you get it right!

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

_____ Answer: _____

Total Points Earned: _____



Layers of the Atmosphere Mania Game QUESTIONS

- 1. What is unique about the troposphere?**
- 2. The coldest temperatures occur at what altitude?**
- 3. Temperature increases in what two layers?**
- 4. Temperatures decrease in what two layers?**
- 5. The layer of the atmosphere where weather occurs is the thermosphere. T or F**
- 6. The thermosphere is the layer that contains ozone. T or F**
- 7. The troposphere is divided into two parts. T or F**
- 8. The ionosphere lies between the mesosphere and exosphere. T or F**
- 9. Which layer contains electrically charged particles that reflect radio waves?**
- 10. What is the most abundant gas in the atmosphere? 11. What is the second most abundant gas in the atmosphere?**
- 12. In what layers do human beings live? 13. In what layer does most weather occur?**
- 14. What are two sources of carbon dioxide in the atmosphere?**
- 15. What are two processes that use oxygen?**
- 16. Where is the amount of water vapor in the atmosphere most likely to be higher, above a desert or tropical rain forest?**
- 17. What is the condition of the atmosphere at a particular time and place called?**
- 18. What is constant in the tropopause?**
- 19. How high can geese fly?**
- 20. Why are clouds generally observed to form only in the troposphere?**



Mania Game Set Up:

1. Print out the Question page once. Cut out the questions into simple strips and put into a Dollar Store basket.
2. Print out enough of the first page (the Game Sheet) for every team you will play the game with. Fold in half.
3. You should have already trained your students to move into team formation within one minute. (Listen to my audio Podcast on playing Team Games.) After they are arranged, tell them we are playing Layers of the Atmosphere Mania. They get excited after they've played Mania once!
4. Explain the game the first time you play it with your students. The Runner takes one question strip back to the Team. They work together to answer the question. Students change who writes the answer each time **IN PENCIL**. They record # and answer. The Runner runs back up to the Teacher. The Teacher checks the answer. The Teacher either hands it back if the answer is wrong or puts a big OK on top of it with a colored marker. If correct, they put the strip back into the basket and grab another one. It's their responsibility to be sure they don't take a duplicate back! The game is over when the first team has all nine boxes filled with your OK.
5. Assign points based on how many teams you have. So if six teams, the first place team gets six points, etc. Record on Team Game sheet contained in the Podcast Folder.

ATMOSPHERE MANIA ANSWERS:

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|---|--|
| 1. We live in it. All weather occurs in it. | 11. Oxygen |
| 2. 80 km (approx.) | 12. troposphere |
| 3. stratosphere, thermosphere | 13. troposphere |
| 4. troposphere, mesosphere | 14. animals produce, burning of fossil fuels |
| 5. F | 15. fire, animals and plants |
| 6. F | 16. above tropical rain forest? |
| 7. F | 17. Weather |
| 8. T | 18. temperature |
| 9. ionosphere | 19. about 8 km |
| 10. Nitrogen | 20. that's where most of water vapor is |