Writing tasks for primary children

'Meet the Scientist' Profile

Imagine yourself in the role of a climate scientist.

What would your profile look like if others were to read about you in 'Meet the Scientist'?

A template of the 'Meet the scientist' profile which children could use is attached to the end of this document.

Recount / Diary Writing

Imagine yourself in the job of an atmospheric scientist. Write about what you might do on a day at work. *Prompts to ask the children:*

- Where would you be working? Which country? Indoors or outdoors? Lab or office?
- What might you be wearing and why?
- What scientific instruments would you work with?
- What writing might you be doing?
- What maths might you be doing?
- Who might you speak with?

Persuasive Writing

Use your knowledge of air pollutants to make a **leaflet or poster** persuading car drivers to switch off their engines when they stop near schools, or persuading drivers that they should walk when their journey is short.

Prompts to ask the children:

- How do we know when levels of air pollutants are particularly high?
- When are daily levels of air pollutants at the highest levels?
- How might high levels of air pollutants affect people's health/the temperature of Earth?

Explanation

How have the levels of air pollutants changed during a day/week/year in one of the places you have studied? Write a **newspaper article** summarising the scientists' data and explain what this might mean for life on Earth. You might like to include graphs or tables in the report. Remember to give them captions.





'Gases in the Air' Word Search

| Z | Р | R | В | J | V | M | Τ | K | F | В | \mathbf{E} | Ρ | С | Η |
|---|---|---|---|---|---|---|---|---|---|---|--------------|---|---|---|
| С | Y | N | Н | В | S | G | U | Y | В | 0 | D | Y | G | Α |
| Z | P | P | M | D | U | N | Y | E | 0 | I | I | Τ | N | M |
| A | A | K | D | A | В | I | Χ | S | I | L | Χ | K | I | А |
| В | D | K | V | В | L | S | D | Н | N | I | 0 | K | Τ | С |
| L | R | Τ | M | M | I | N | K | F | D | N | I | S | L | I |
| K | Y | R | R | S | M | E | С | V | I | G | D | Н | E | D |
| M | I | 0 | U | Τ | I | D | Y | Н | С | С | N | Y | M | 0 |
| Z | С | J | В | J | N | N | J | Н | A | Z | 0 | D | В | D |
| D | E | Χ | D | Н | G | 0 | Τ | Τ | T | J | В | R | M | M |
| N | Ε | G | Y | Χ | 0 | С | S | С | 0 | С | R | 0 | A | U |
| L | L | I | Q | U | I | D | A | A | R | M | A | G | J | I |
| Р | S | 0 | L | I | D | L | G | E | D | 0 | С | E | F | L |
| Ε | S | I | J | N | E | G | 0 | R | T | I | N | N | V | Ε |
| Ε | S | K | F | D | D | 0 | V | J | N | Р | Y | Q | N | Η |

Find the words below in the grid above.

| acid | indicator |
|----------------|-----------|
| boiling | liquid |
| carbon dioxide | melting |
| condensing | nitrogen |
| dry ice | oxygen |
| gas | solid |
| helium | subliming |
| hydrogen | |





'Gases in the Air' Quiz

Use your research skills to find out the answers to these questions.

Use these words to answer the questions below:

NITROGEN, OXYGEN, CARBON DIOXIDE, ARGON, HYDROGEN, HELIUM, WATER

- 1. Which gas in the air is needed for living things to stay alive?
- 2. What gas makes up most of the air?
- 3. Which gas explodes with a loud bang?
- 4. Name two low density gases that can make balloons float in the air.
- 5. Which gas can be cooled down to make dry ice?
- 6. Which gas makes water acidic?
- 7. Which low density gas does not burn?
- 8. What two chemicals are made when a fuel burns?

Use these words to answer the questions below:

BOILING, MELTING, CONDENSING, FREEZING SUBLIMING

- 9. What do you call the change when a liquid becomes a gas?
- 10. What do you call the change when a gas becomes a liquid?
- 11. What do you call the change when a solid becomes a liquid?
- 12. What is the name used when solid carbon dioxide changes straight to a gas?





Answers to 'Gases in the Air' Quiz

Use these words to answer the questions below:

NITROGEN, OXYGEN, CARBON DIOXIDE, ARGON, HYDROGEN, HELIUM, WATER

- 1. Which gas in the air is needed for living things to stay alive? **OXYGEN**
- 2. What gas makes up most of the air? **NITROGEN**
- 3. Which gas explodes with a loud bang? HYDROGEN
- 4. Name both low density gases that can make balloons float in the air. HYDROGEN and

HELIUM

- 5. Which gas can be cooled down to make dry ice? CARBON DIOXIDE
- 6. Which gas makes water acidic? CARBON DIOXIDE
- 7. Which low density as does not burn? **HELIUM**
- 8. What two chemicals are made when a fuel burns? WATER and CARBON DIOXIDE

Use these words to answer the questions below:

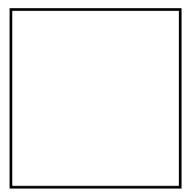
BOILING, MELTING, CONDENSING, FREEZING SUBLIMING

- 9. What do you call the change when a liquid becomes a gas? BOILING
- 10. What do you call the change when a gas becomes a liquid? **CONDENSING**
- 11. What do you call the change when a solid becomes a liquid? MELTING
- 12. What is the name used when solid carbon dioxide changes straight to a gas? **SUBLIMING**





Meet the scientist



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|----|---|---|---|--|
| 14 | a | | C | |

Place of Birth:

Place of Work:

Job Title:

Who do you work for?

What do you do?

What skills do you have to use in your job?

Why do you like your job?

What inspired you to choose a career in science?



