

Wacky Zacky YOU: Discovering the Scientist Within

Objective:

Students will explore key scientific traits and skills as exemplified by Zacky in 'Wacky Zacky Bugs Out' by Tarana Peaches and Henrique C. Rampazzo, and connect them with their own experiences to nurture their inner scientist, sparking curiosity, critical thinking, and a zeal for scientific exploration.

Instructions:

Examine the 10 key characteristics of a scientist listed below. For each one, first describe how Zacky exemplified this trait in 'Wacky Zacky Bugs Out,' and then share a personal instance where you displayed the same characteristic. If you're finding it difficult, consider reflecting on experiences in everyday settings such as cooking in the kitchen, personal care routines, or resolving arguments or disagreements.

Scientists are...

1. **Curious:** Scientists frequently ask questions and seek to understand how things work.
 - a) When did Zacky demonstrate curiosity?
 - b) Recall a time when you were curious about something. What kind of questions did you ask?
2. **Observant:** Scientists use their senses to notice and pay attention to details in their environment.
 - a) What observations did Zacky make about his environment?
 - b) Think of a moment when you observed something interesting or unusual. What did you notice?
3. **Critical Thinkers:** Critical thinking involves analyzing information, evaluating evidence, and reasoning logically to form conclusions or solve problems.
 - a) Identify a moment where Zacky had to think critically to solve a problem.
 - b) Describe a situation where you used critical thinking to come to a conclusion or solve a problem.
4. **Creative:** Scientists often think outside the box and are not afraid to explore novel ideas to develop hypotheses, design experiments, and solve complex problems.
 - a) What was one creative solution Zacky came up with in the story?

- b) Share a creative idea or solution you've had. How did it help you or others?
5. **Perseverant:** Research and experimentation can be challenging and time-consuming, but scientists continue their work despite setbacks and failures.
- a) When did Zacky show perseverance, despite initial failures?
b) Describe a time you kept trying, even when things were challenging.
6. **Skeptics:** Scientists question existing ideas and their own results, ensuring their conclusions are based on solid evidence.
- a) How did Zacky show skepticism or question his own results?
b) Think of a time you questioned or doubted something. What did you find out?
7. **Collaborators:** Science often involves working with others, sharing ideas, and building on the work of peers. Effective communication and teamwork are essential.
- a) Though Zacky worked alone, there was a time when he collaborated in a non-traditional sense. Who did Zacky collaborate with and what information did he seek?
b) Recall an instance where you worked well in a team. What was your contribution?
8. **Ethically Aware:** Scientists must consider the moral implications of their work, ensuring their research is conducted responsibly and benefits society.
- a) How did Zacky's actions in the story show awareness of right and wrong?
b) Think about a time when you had to consider what was right or wrong in a decision. What did you decide?
9. **Adaptable:** The ability to adjust to new information, changing conditions, and unexpected results is crucial in the ever-evolving field of science.
- a) How did Zacky adapt to live harmoniously in his environment with the insects?
b) Describe a time when you had to adapt to a change. How did you handle it?
10. **Passionate for Learning:** A lifelong passion for learning and discovery drives scientists to continuously expand their knowledge and understanding.
- a) When did Zacky show a love for learning or discovering new things?
b) Share something you are passionate about learning. Why does it interest you?