



Answer Key for “Computational Fluid Dynamics” Listen to the Experts

Directions: View the Computational Fluid Dynamics interview in the Wind Tunnel Section of the Wright Flyer Online website. After you listen to the expert talk about her work, answer the questions below using complete sentences.

1. Give the expert's job title and tell what she does in her job.

Research Scientist. She tests advanced supersonic aircraft and aircraft that fly at high angles of attack. She also develops new methods for CFD in the design and testing of wings.

2. In your own words, explain what Computational Fluid Dynamics (CFD) is.

A study of aircraft dynamics using complex mathematical equations to describe and predict how an aircraft responds to the air flowing around it.

3. Explain why supercomputers are needed for this type of research.

The mathematical equations are so difficult and complex that it would take too long for people to do.

4. How do the supercomputers display the results of the mathematical equations they solve?

The supercomputers show the results of the mathematical equations by creating a graphic or picture with colored lines to show the airflow.