Clip 3: Read these questions then watch the video from 13:10 to 23:40. Stop the video at 23:40 to answer these questions.

https://youtu.be/N3qh0SBH9EU?t=13m10s

1) Who engineered the SS Great Britain? ____________________________

2) What is the problem with paddlewheels on ocean ships?

3) What is the solution to the problem with paddlewheels?

4) What does Archimedes screw do?

5) How many more pounds does the SS Great Britain weigh than the SS Great Western?

6) What does the tug-of-war demonstration show?
   a. The paddlewheel boat is stronger.
   b. The propeller boat is more efficient.
   c. The propeller stays in the water the entire time.
   d. The paddlewheel boat starts fast but loses strength quickly.

7) What problem is caused by transitioning from a paddle wheel to a propeller?

8) What is the solution to the problem caused by this transition?

9) What problem would traditional propellers cause the Independence of the Seas?

10) How do “Azipods” solve this problem with traditional propellers?

11) Which directions can the Independence of the Seas go? (Select all that apply.)
   □ Forward    □ Backwards   □ Left      □ Right       □ Sideways

12) What problem do the divers try to find?

Critical Thinking: Do you think a car uses a propulsion system that is more like a drive shaft/propeller or a paddle wheel? How does it propel a car forward? (Use the back of this sheet to answer.)

Video at: https://www.youtube.com/watch?v=N3qh0SBH9EU.
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