

Score:	INTERSTELLAR	Name:
Notes:	An adventure about mankind's will to survive	Period:

Interstellar is a movie about the human race being faced with a civilization ending blight. A small group of brave individuals explore possible new habitable worlds for humans. The following questions will help guide you through the movie and hopefully get you thinking about the future.

1. The Cooper family hijacks a UAV (Unmanned Aerial Vehicle). What do you know about UAVs and how they are used today?
2. While at the parent-teacher conference, Murphy's teacher mentions that the Apollo program -- the same program that landed humans on the Moon -- was just propaganda to convince the Soviet Union to bankrupt themselves trying to do the same. The reason for this was to encourage children to take care of their own planet, rather than wasting precious resources day dreaming of leaving it. Which side of the fence would you sit on? Would you look for ways to save Earth and our ability to stay there, or would you look to the sky, and find a new planet to live on? Why?

Useful Vocabulary

Blight: A specific symptom affecting plants in response to infection by a pathogenic organism. The potato famine of Ireland was caused by blight.

Event horizon: Is a point in which not even light can escape the gravitational influence of the black hole.

Maroon: The intentional action of leaving someone in a remote area such as an inhabitable island.

Rendezvous: When two objects meet and typically dock together while in space.

Time dilation: A difference of elapsed time between two events as measured by observers either moving relative to each other or differently situated from gravitational masses.

UAV: Unmanned Aerial Vehicles are remote controlled or autonomous flying vehicles.

3. A) What natural disaster(s) is Earth suffering from in the beginning of Interstellar?
B) If one of these happened now what actions would you take to protect yourself?
4. Cooper, Doyle, Romilly, and Dr. Brand (female) rendezvous with the Endurance in orbit around Earth. Once onboard, they begin to spin the Endurance. Why? (Think about the physics happening here!) Draw a diagram.
5. Why or why isn't space exploration important for the people in the movie interstellar? Why or why isn't space exploration important in today's society? Defend your answers.
6. Explain time dilation as best as you can.
7. A) Estimate how long Dr. Mann went without human contact while on the ice planet:
The Lazarus mission was _____ years ago. It takes _____ years to get to Saturn from Earth. Cooper and Dr. Brand were on Miller's planet for approximately _____ years. This means the total time Dr. Mann went without human contact is: _____ years.

B) Consider the longest time away from human contact you've experienced. What did you do to keep yourself occupied?

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8. Why did Dr. Mann try to maroon the rest of the crew?
9. There are several examples of automated vehicles throughout the movie (UAV, Combines, TARS). Since we know this technology exists, discuss some possible reasons that the NASA group sent humans rather than machines on these missions.

B.) Is there anything in today's society that you think should always be done by humans? What are your reasons?

10. When Dr. Mann is trying to dock with the Endurance, the external scenes have no sound. Why is this?
11. Dylan Thomas' poem is referenced frequently throughout the movie. The poem is written at right.
A) How does this poem relate to *Interstellar*?

B) What does it mean to you?

12. Recently scientists have managed to indirectly observe a super massive black hole in the center of our galaxy. Using your imagination and what we have discussed in class, what do you imagine it to be like on the other side of the event horizon?
13. Why is Cooper younger than Murph at the end of the movie?
14. A) What do Cooper and TARS ultimately go and do at the very end of the movie?

B) How do Cooper and TARS' actions fit within the message of this movie?
15. Think of what you have learned in Physics, Chemistry, Biology, and any other science class.
A) What did the movie *Interstellar* get right?

B) What did it get wrong?

Do not go gentle into that good night

Dylan Thomas, 1914 – 1953

Do not go gentle into that good night,
Old age should burn and rave at close of day;
Rage, rage against the dying of the light.

Though wise men at their end know dark is right,
Because their words had forked no lightning they
Do not go gentle into that good night.

Good men, the last wave by, crying how bright
Their frail deeds might have danced in a green bay,
Rage, rage against the dying of the light.

Wild men who caught and sang the sun in flight,
And learn, too late, they grieved it on its way,
Do not go gentle into that good night.

Grave men, near death, who see with blinding sight
Blind eyes could blaze like meteors and be gay,
Rage, rage against the dying of the light.

And you, my father, there on the sad height,
Curse, bless, me now with your fierce tears, I pray.
Do not go gentle into that good night.
Rage, rage against the dying of the light.