

Hub B Year 3 Home Learning


Week beg 24th May 2021

Reading

Lesson 1: Inference

We are continuing with our text – Hidden Figures. We finished last week's learning at the page where President Kennedy announced his ambition to land a human being on the Moon. Continue reading the next page below and use the sentence stems to make inferences.

I DO	
Inference Stems	
The word ____ tells me that...	
The part ____ tells me that...	
This makes me think that...	because...
I think this character _____	
I think the setting is....	
I think the mood is...	
I think the writer's viewpoint is...	
I think this character's viewpoint is...	



The people at the laboratory had to work together from morning to night to figure out how to send astronaut John Glenn into space – and bring him back home to Earth safely. Katherine Johnson knew she could use math to help.

“Tell me where you want his spaceship to land, and I’ll tell you where to launch it,” Katherine told her boss.

Katherine helped calculate the trajectories – or pathways – that rockets traveled through space. She had to plan Glenn’s exact route, from takeoff in Florida to splashdown in the Atlantic Ocean. There was no room for error!

We DO

Inference Stems

The word _____ tells me that...

The part _____ tells me that...

This makes me think that... **because...**

I think this character _____

I think the setting is....

I think the mood is...

I think the writer's viewpoint is...

I think this character's viewpoint is...



No one was better than Katherine at solving these tricky math problems. Days before his mission, John Glenn wanted Katherine to double-check the machine computer's trajectory calculations, to make sure it hadn't made any mistakes.

When Katherine said the numbers were correct, Glenn was ready to go. On February 20, 1962, Glenn blasted off into space, circled the Earth, and made his way home safely.

Lesson 2: Inference

Here is some of the key vocabulary you will be seeing this week:



Orbit: The curved path of an object or spacecraft as it revolves around a star, planet, or moon.

Satellite: A man-made object placed in orbit around the Earth, its moon, or another planet to collect information or help with communication.

Sonic boom: The sound associated with shock waves created when an object travels through the air faster than the speed of sound.

Speed of sound: The distance traveled by a sound wave in a fixed period of time. Sound travels most slowly in gasses, faster in water, and fastest in solids.

Turbulence: A sudden jolt or shift in airflow affecting an aircraft.

Wind tunnel: A tool used in aeronautics research to study the effect of air moving over an object.

Make inferences using these sentence stems below:

I DO

Inference Stems

The word _____ tells me that...

The part _____ tells me that...

This makes me think that...

I think this character _____

I think the setting is....

I think the mood is...

I think the writer's viewpoint is...

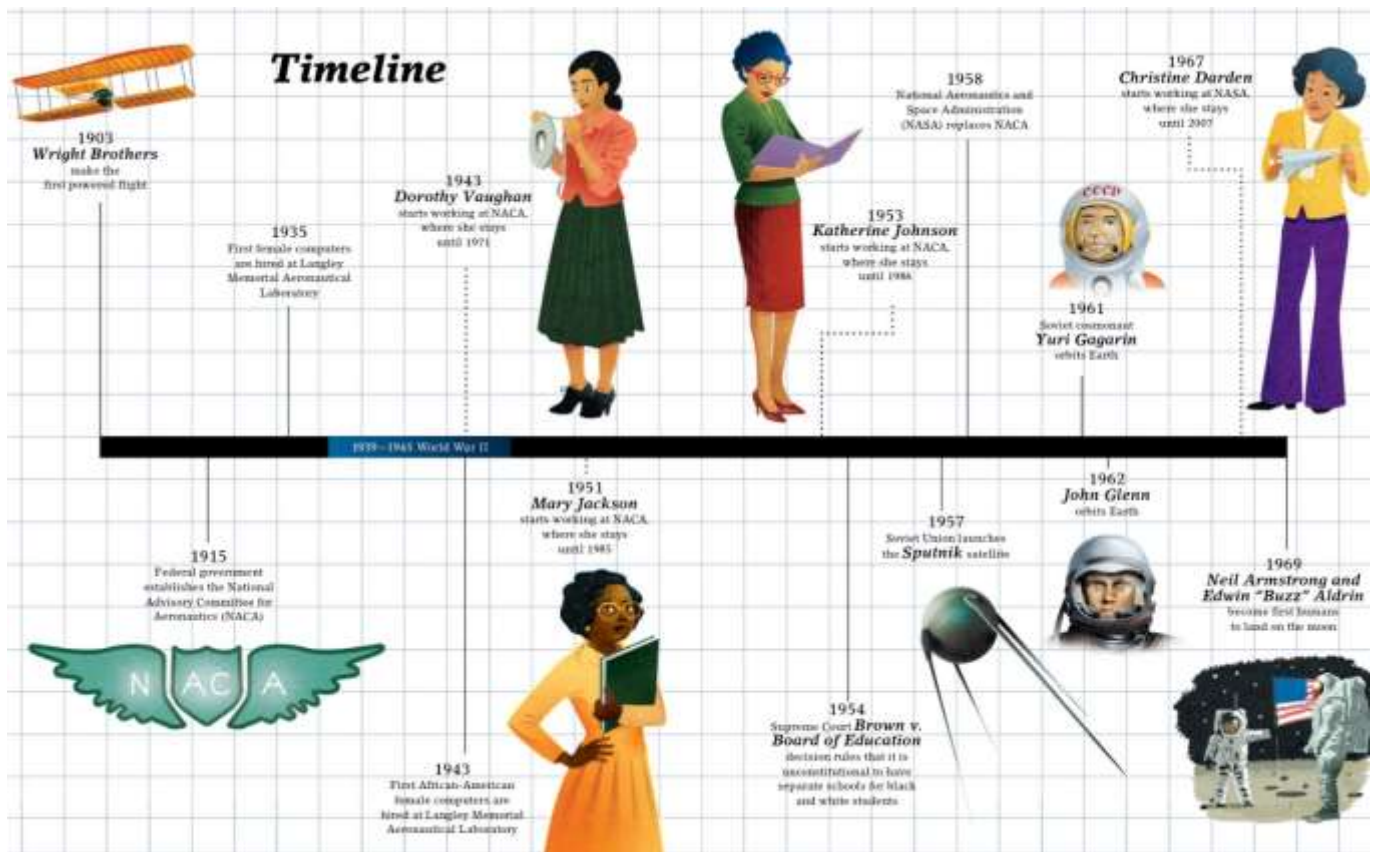
I think this character's viewpoint is...

because...



Lesson 3: Inference - Selfie

Below is a timeline of the key events from the lives of the four main characters as well as important historical events. Answer questions about the timeline using the SELFIE below.



- 1) Why is the timeline an effective way of showing the key information?
- 2) When was the Second World War?
- 3) Who was the first person to orbit Earth?
- 4) When was the first powered flight?

Lesson 4: BIG PICTURE

Below is the text and the questions for the big picture comprehension.

Read the text and retrieve the key information for the first three questions. Use the images as well as the words to help you with the inference question.

Meet the Computers

Dorothy Johnson Vaughan (1910–2008)

Dorothy was born September 20, 1910, in Kansas City, Missouri. She and her family moved to West Virginia when she was eight. Dorothy received a full scholarship to Wilberforce University, a historically black college in Ohio, where she graduated at age nineteen with a degree in mathematics education. She married Howard Vaughan in 1932, and they had six children.

After college, Dorothy worked as a high school math teacher in Farmville, Virginia. In 1943, she began her job at Langley Memorial Aeronautical Laboratory in Hampton, Virginia. She worked as a mathematician and computer, later becoming NASA's first African-American supervisor. When machine computers were introduced at Langley, Dorothy learned the programming language FORTRAN and taught it to her staff. She died in 2008 at age ninety-eight.



Mary Winston Jackson (1921–2005)

Mary was born April 9, 1921, in Hampton, Virginia. She graduated with highest honors from the all-black Phoenix High School, then graduated from Hampton Institute in 1942 with degrees in mathematics and physical science. She taught math at an all-black high school in Maryland for a year before taking a job as a bookkeeper back in her hometown. She married Levi Jackson Sr., and they had two children.

Mary began work as a computer at Langley Memorial Aeronautical Laboratory in 1951. She worked in a supersonic wind tunnel, studying the impact of wind forces that were nearly twice the speed of sound. In order to be promoted to engineer, she needed to take graduate-level courses in physics and math. She had to petition the City of Hampton, Virginia, for permission to attend the classes because they were held at a whites-only high school. She completed the classes, and in 1958 she became the first female African-American aerospace engineer at NASA. Late in her career, Mary took a position in NASA's Equal Opportunity Office, where she worked to support the careers of other women and minorities. She volunteered for more than thirty years as a Girl Scout leader. She died in 2005 at age eighty-three.



Katherine Coleman Goble Johnson (1918–)

Katherine was born August 26, 1918, in White Sulphur Springs, West Virginia. Her community did not offer public school for African Americans after eighth grade, so her family arranged for her to attend the high school run by West Virginia State Institute, 125 miles away. She completed high school at age fourteen and went to West Virginia State College, graduating *summa cum laude* at age eighteen with degrees in mathematics and French. In 1939, she married her first husband, Jimmy Goble, and they had three children. Jimmy Goble died of a brain tumor in 1956. Katherine married James Johnson in 1959.

Katherine taught high school math before beginning work as a computer at Langley Memorial Aeronautical Laboratory in Hampton, Virginia, in 1953. Her expertise in analytic geometry earned her a place in the Flight Research Division. She worked on the flight trajectories—the flight paths—for Project Mercury, the program that sent the first American astronauts into space. Astronaut John Glenn specifically requested that Katherine double-check the computer's calculations of his spacecraft's orbit around the Earth. She also contributed calculations to the 1969 *Apollo 11* mission to the moon.



Big Picture**Retrieval**

1. How old was Dorothy when she died?
2. What was Katherine born?
3. Dr Christine became an expert in what?

Inferring

4. The title is 'Meet the Computers'. What does this mean?

Making Connections

5. What do the 4 main characters have in common?
6. Can you make connections between this and something else you have seen/read?

English**Lesson 1 and 2**

This week, you will be using your plan to write your internal monologue.



Here are the key features you will need to include:

- Show not tell e.g. my heart pounded
- First person
- Past tense
- Rhetorical questions e.g. why would he do that?
- Brackets for extra information

Lesson 3:

Now that you have finished writing your monologue, you are going to self-assess using the monologue checklist below. Identify how you have been successful.

What have you included? What is the impact on the reader?

LI: to <u>self-assess</u> a piece of writing <u>Context: Monologue</u>	
<ul style="list-style-type: none"> Recap the purpose of your monologue Read your monologue carefully to identify features included Reflect on the success of your writing 	
<p>Read your monologue carefully to identify how you have been successful.</p> <p>Here is an example to support you-</p> <p><i>I was successful in writing my monologue because I used show not tell to create an image in the reader's mind of Bill's facial expression and body language which gave them clues about his emotions. An example of this was 'hands shaking and sweating' which told the reader that Bill was nervous walking up to the late gate.</i></p> <div data-bbox="172 913 497 1124">  <p>HOW SUCCESSFUL WAS YOUR WRITING TODAY? JUSTIFY THIS</p> </div> <div data-bbox="529 945 1327 1146"> <p>I was successful in my writing my monologue because...</p> <p>I included...</p> <p>The impact on the reader was...</p> </div>	

Monologue Checklist	
Rhetorical questions	
Show not tell	
First person	
Past tense	
Repetition	

Maths

Lesson 1: To find the duration of time.

Today you are going to use your learning from last week to find the duration of time. Remember, this means how long something lasts. Today you will need to count on in hours and minutes to calculate and record the duration.

1) Calculate the duration of the following TV programmes:

Tv Programme	Start Time	End Time	Duration
The Football Show	12:00	14:00	
An Adventure	10:40	15:40	
Dennis the Explorer	15:15	16:20	

E.G. If the programme started at 12:00, I am going to count on in hours and I know that the duration of time will be 2 hours.

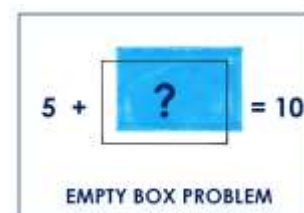
2) Calculate the time the following children spent running and complete the sentences:

Rosie started running at 7:20am and stopped at 8:45am.

Tommy started running at 9:10 and stopped at 9:55

Rosie ran for ___ minutes.

Tommy ran for ___ minutes.



3) Amir gets on a bus at 15:23. It arrives at 16:22.
How long was the bus journey?

The bus journey was ___ minutes long.



Lesson 2: To reason about a mathematical statement.

Today you are going to apply your learning to complete a variety of word problems. You will need to explain and justify your reasoning after solving each problem. You can discuss your ideas with someone at home.

1) Eva starts playing her piano at 11:30.

She plays for 45 minutes before having a half an hour break. She then plays for another 15 minutes.

What time did she finish?

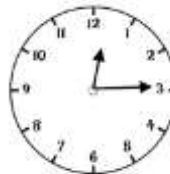
Eva will finish her lesson at ____.



2) Lunchtime begins at the following time:

Lunchtime ends at:

1:10



Teddy and Rosie are working out how long lunchtime lasts for.

Teddy says "I did three quarters of an hour and then added 10 minutes."

Rosie says "I did 1 hour and took away 5 minutes."

Whose method is correct?

I agree with ____ method because ____



3) Eva and Mo are having a race.

It takes Eva 3 and a half minutes to complete the race. It takes Mo 3 minutes and 15 seconds.

Eva says:



Is Eva correct? Explain how you know.

Eva is ____. *I know this because ____.*

Lesson 3: To apply knowledge of time.

Today you are going to complete your own obstacle course. You will need a stopwatch to time yourself completing the full course. Here is an example obstacle course you can complete whilst you are at home:

- 1) 20 star jumps
- 2) 15 burpees
- 3) 10 high knees
- 4) 20 sit ups
- 5) 20 frog jumps
- 6) 15 press ups
- 7) Run around the edge of your room
- 8) 10 jumps on one leg
- 9) 10 jumps on the other leg
- 10) 15 jumping squats



When you have completed the course, answer the following questions in your books:

- 1) How long did it take for you to complete the course?
- 2) How many seconds did it take for you to complete the course?
- 3) How many minutes did it take for you to complete the course?
- 4) What knowledge did you need to answer the above questions?

Lesson 4: To reflect on a learning journey.

Today you are going to reflect and evaluate your learning journey of time. Before you begin, recap what you have learnt about time, what you have found challenging and what your next steps are. You could even discuss your reflections with someone at home.

Use these discussions to answer the following questions in your books:

1) What knowledge/strategies did you use to complete the final activity?
To complete the activity I used my knowledge of ____.

2) What has been successful in your learning journey?
This term, I have learnt ____.

3) What have you found challenging? How did you overcome this?
I found ____challenging. I overcame this by ____.

4) Where are you currently on the progress line? What are your next steps?
On the progress line I am a ____.
I would like to continue to ____.





Science

LI:

RE

LI:

History

Lesson 1:

Lesson 2:

Art