

2013

Inside and Outside: Wonder and Let's Relate to Genetics: DNA

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UNDERSTANDING BY DESIGN

Unit Cover Page

Unit Title: Inside and Outside: *Wonder* and *Let's Relate to Genetics: DNA*

Grade Level: 6th

Subject/Topic Area(s): Reading/Informational Text

Designed By: Stephany Weaver

Time Frame: 17-20 Days

School District: KIPP San Antonio

School: KIPP: Aspire Academy

School Address and Phone: 735 Fredericksburg Rd, San Antonio, Texas 78201, 210.735.7300

Brief Summary of Unit (Including curricular context and unit goals):

This unit is designed for the second semester of sixth grade as introduction to informational text. The unit focuses on determining importance in informational text and making inferences in fictional and informational text. Students will analyze text features in informational texts and author's purpose. Students will be asked to think about the way DNA affects our lives and the possibility of DNA alterations. Students will understand that authors organize a text to highlight the main idea and important information.

Unit: Inside and Outside: Wonder and Let's Relate to Genetics: DNA

Grade: 6th reading

Stage 1: Desired Results

Understandings

Students will understand that...

Authors organize texts to highlight the main idea.

Readers must engage their own background knowledge to comprehend texts.

Readers make connections between and across multiple texts of various genres to enrich their understanding the texts.

DNA determines many aspects of our lives.

Essential Questions

Overarching:

How much does DNA decide who we are?

What does a reader gain from making connections between fiction and non-fiction?

Topical:

How does an author organize a text to highlight the main idea?

Why is important to make inferences as we read?

Should we allow people to make changes to DNA?

Knowledge

Students will know...

- plot of *Wonder*
- role of DNA in society
- facts about DNA replication and it's relation to genes

Skills

Students will be able to...

- Fig. 19D infer meaning from text and use textual evidence to support understanding
- 10(C) explain how different organizational patterns (e.g., proposition-and-support, problem-and-solution) develop the main idea and the author's viewpoint;
- 10(D) synthesize and make logical connections between ideas within a text and across two or three texts representing similar or different genres.
- (F) make connections (e.g., thematic links, author analysis) between and across multiple texts of various genres, and provide textual evidence
- interpret factual, quantitative, or technical information presented in maps, charts, illustrations, graphs, timelines, tables, and diagrams.[12B]

Stage 2: Assessment Evidence

Performance Task:

#1 What should Mrs. Pullman do?: Students will take on the role of Mrs. Pullman's doctor. The doctor took a sample of her son's, August Pullman, DNA and studied his genes and found that the baby would be born with a facial deformity. The students must use facts about DNA, evidence from *Wonder*, and evidence from other expository texts on DNA to persuade Mrs. Pullman to alter or not to August's DNA. Students will focus their research using the following essential question: Should we allow people to make changes to their DNA? Students will present a graphic organizer showing the connections between quotes from *Wonder* and *DNA*.

#2 Theme in a Bottle: Students will write a letter explaining what a character from *Wonder* learned from that character's point of view. The character has decided to send a message in a bottle or some other appropriate container. Students will decorate their container with symbols and scenery appropriate to *Wonder* and its theme. This letter should express a character's feelings about the life lessons he or she has learned. At the beginning of the letter students will state the theme. In the body of the letter, students will incorporate three points that support their ideas. The bottle they create will be given to a student in another class who will judge if they presented three points that connect to the theme.

Other evidence:**CSCOPE Informational Text Assessment****Accelerated Reader Quiz: *Wonder*****Exit Tickets****Stage 3: Learning Activities**

(Steps taken to get students to answer Stage 1 questions and complete performance task)

Note: Students will read *Wonder* during a separate Silent Sustained Reading enrichment class.

Day 1 EQ: Should we allow people to make changes to DNA?

1. Review Homework: BrainPop Video (<http://www.brainpop.com/science/cellularlifeandgenetics/dna/>)
2. Hook the students with "Four Corners". S will answer the question: Should we allow people to make changes to their DNA?
3. Introduce the remaining essential questions
4. Teach students P.O.W.E.R. Strategy
5. Student and teacher read "Blueprint of Life" from *DNA*
6. Exit Ticket: Why did the author include a picture of Earth and the moon?
7. Watch book trailer for *Wonder*
8. Students develop focus question
9. Students read *Wonder*, pgs. 1-18

Day 2 EQ: How much does DNA define who we are? and Why is it important to make inferences as we read?

1. Homework Review
Note: The teacher must make a video presenting the information from this document created by Austin Public Schools: http://curriculum.austinisd.org/la/resources/documents/LA_TenTypesOfInference.pdf. The teacher will post the video to a website that is available to students.
2. Teacher and students reread "Blueprint of Life", pages 5-6 from *DNA* and make a problem-solution inference
3. Students reread pages 6-7 and make an inference, and identify type of inference
4. Exit Ticket: Student read pages 8-9 of *DNA*, make an inference, and identify type of inference
5. Students read *Wonder*, pgs. 19-37, make an inference

Day 3

1. Present deductive lesson on Cause and Effect and notes

2. Teacher and students P.O.W.E.R. “Missing in Action” and “Protein Problems” from *DNA*
3. Teacher identifies 1 cause and effect relationship in “Missing in Action”
4. Students identify 1 cause and effect relationship in “Protein Problems”
5. Students read *Wonder*, pgs. 38-55, make an inference about location

Day 4 EQ: How does an author organize a text to highlight the main idea?

1. Entrance Ticket
2. Present lesson on determine importance with the sequential order organizational pattern
3. Student and teachers P.O.W.E.R pages 14-15 from *DNA*, use highlighting strategy from <http://static.ehe.osu.edu/sites/beyond/penguins/downloads/feature-story-templates/strategy-focus-steps-reader-of-rocks.pdf>
4. Students read pages 16 -17 from *DNA*, use same strategy
5. CFU: Summary
6. Exit Ticket: How did the text structure highlight what was most important in the text?
7. Students read *Wonder*, pgs. 56-74, make an inference about character traits or feelings

Day 5

1. Hook: Describe and Classify Ms. Weaver’s iTunes
2. Review “Blueprint of Life”: Students reread and highlighting strategy
3. CFU: “Determining importance is important, because....”
4. **Assessment: Students read “Twin Studies” from *DNA* and determine important ideas and answer the following questions: Which text features support that “Twin Studies” is organized using the description and Classification Structure?**
5. Students read *Wonder*, pgs. 75-93, make an inference about an action

Day 6

1. Read “DNA in Our Lives” from *DNA*
2. Present lesson on determine the difference between what is important to the reader and what is important to the author
3. Teacher does one Double-Sided Journal Entry
4. Students reread “DNA in Our Lives” and complete two column notes entries
5. Exit Ticket: What helped you distinguish what’s important to you and what’s important to the author?
6. Students read *Wonder* 94-114, make an inference about the setting

Day 7

1. **Assessment: Students read “DNA in Our Lives” and choose between two column notes or highlighting strategy**
2. Students read *Wonder*, pgs. 115-135, make an inference about character trait/feeling

Day 8 EQ: What does a reader gain from making connections between fiction and non-fiction?

1. Stations: At each station students will read a quote from *Wonder* and a quote from *DNA*. Students will use Say Something protocol to make connections at each station. Students will be given talking chips for accountability.
2. Students read *Wonder*, pgs. 136-156

Day 9

1. Fly Swat: Teacher will read different types of inferences and pairs of students will race to the board to identify the type of inference.
2. Students will P.O.W.E.R. “This is a Face of War” from Scholastic Scope, November 12, 2012.

3. Exit Ticket: Students will make an inference using "This is a Face of War"
4. Students will read *Wonder*, pgs. 157-177, make an inference

Day 10

1. Stations: Students rotate in stations where there is quote given from *Wonder* and they must connect it with "This is a Face of War". Students will use the Say Something Protocol.
2. Exit Ticket: How is the author's purpose similar in *Wonder* and "This is a Face of War"?
3. Students read *Wonder*, pgs. 178-198, make an inference

Day 11

1. **Assessment: Students will choose a text** (additional texts attached) **and make a poster explaining the text features and identify the most important information. Students will answer the question: How did the reader know what the important ideas where?**
2. Students read *Wonder*, pgs. 199-219, make an inference

Day 12

1. Students P.O.W.E.R "They're Back" and complete "Facts-Questions-Response" graphic organizer.
2. Exit Ticket: Students will identify support and challenges to the topic of "They're Back".
3. Students read *Wonder*, pgs. 220-240, make an inference about location

Day 13 EQ: Should we allow people to make changes to DNA?

1. Teacher will review author's purpose and present the extension for author's purpose (inform/entertain/persuade the reader that....)
2. Stations: Students will rotate between stations that have different texts that were previously read in class and they will identify the purpose
3. Exit Ticket: Students will read a short passage and determine the author's purpose.
4. Students read *Wonder*, pgs. 241-261, make an inference

Day 14

1. **CScope Unit Assessment: Students will be instructed to use one of the determining importance strategies on their test, i.e. FQR or sticky notes.**
2. Students read *Wonder*, pgs. 262-280, make an inference about character trait/feeling

Day 15

1. Teacher will present both performance tasks. Students will be assigned side for the first performance task. Students will complete the second performance task in the Silent Sustained Reading enrichment class.
2. Students must turn in a graphic organizer showing how quotes from *Wonder* and *DNA* connect to support their position.
3. Teacher will identify groups for reteach based on the previous day's assessment.
4. Students read *Wonder*, pgs. 281-301, begin the second performance task

Day 16

1. Students must turn in notecards for their presentation.
2. Students read *Wonder*, pgs. 302-320, work on Theme in a Bottle

Day 17

1. Students will present their argument to Mrs. Pullman (Teacher).
2. Students take an **Accelerated Reader Quiz** and present their **Theme in a Bottle, performance task #2** in

CW#1

Reading

Work hard. Be nice.

Lifework Directions: You MUST complete this lifework to be ready for class. Please complete the activities while watching the video on BrainPOP(<http://www.brainpop.com/science/cellularlifeandgenetics/dna/>)

TRUE OR FALSE

Determine if the statement is true or false. If false, replace the word(s) in bold with the correct word(s) on the line. If true, write 'true' on the line.

- DNA is found in a cell's **MEMBRANE**.
- Identical twins have **DIFFERENT DNA**.
- **GENES** are sections of DNA that code for certain traits.
- **CHROMOSOMES** are long strands of DNA.
- DNA is **SINGLE**-stranded.
- Clones contain the same **GENETIC MATERIAL**.
- Nearly every cell in your body has a **COMPLETE SET** of DNA.

DRAW IT

In the left box, draw an up-close view of a strand of DNA, including some base pairs. In the right box, draw an entire chromosome.

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Welcome back! I'm so happy to see you. 😊 Stretch

(Insert warm-up activity)

I've got the POWER!

POWER is a _____ that helps a reader understand _____ that an author _____ to communicate _____ to the reader. This strategy is used best with _____ text. Expository text is _____.

P _____	O _____	W _____	E _____	R _____
---------	---------	---------	---------	---------

What are some questions that P.O.W.E.R makes us think of?

CW#1

Reading

Work hard. Be nice.

Directions: Answer the following question using a complete sentence. Use a sentence starter to begin.

The author uses the title to....

The title shows that the author....

1. Why did the author title this section "Blueprint of Life"?

The author entitles this section "Blue Print of Life", because _____

Exit Ticket

Directions: Answer the following question using page 6 in a complete sentence. Use one of the sentence starters to begin.

The author used the picture to...

A picture of Earth is included to

1. Why did the author include a picture of Earth and the moon?

CW#2

Reading

Work hard. Be nice.

Lifework Directions: Watch the PowerPoint uploaded at (insert website) and use it to take notes below.

1. Fill in the blanks

There are _____ types of inferences. You must use _____ and _____ to make an inference.

2. In your own words define each type of inference using the sentence stem below.

A reader makes a _____ inference when _____.

CW#2

Directions: Answer the following question using your notes from

Reading

Work hard. Be nice.

What kind of inference does the reader need to make to answer the question?

- a. Location
- b. Setting
- c. Problem and solution
- d. Cause and effect

- hoping their public relations campaign will —
- A cause students to start picking up trash on their playgrounds
 - B cause smokers to stop throwing cigarette butts on the ground
 - C cause smokers to stop smoking
 - D cause smokers to recycle cigarettes

Direction: Fill out the chart to answer the following question. Identify the type of inference.

What the reader infer that studying DNA will help use do using the information “Your DNA tells your body to grow ten fingers and one nose”?

Words on the Page (The text says...)	Background Knowledge	Inference

Type of Inference: _____

Direction: Fill out the chart to answer the following question. Identify the type of inference.

The reader can infer that “species” means types of animals, because.....

Words on the Page (The text says...)	Background Knowledge	Inference

Type of Inference: _____

CW#2

Reading

Work hard. Be nice.

Exit Ticket

Direction: Fill out the chart to answer the following question. Identify the type of inference.

The reader can infer that more scientists became more interested, because....

Words on the Page (The text says...)	Background Knowledge	Inference

Type of Inference: _____

CW#3

Reading

Work hard. Be nice.

Hola! ☺ Stretch

Read the following excerpt from an expository text and answer the question.

- Pedestrians dropping trash in the street
- Construction project trash
- Uncovered loads in the backs of trucks which spill out onto the streets
- Household trash

As you look at this list, you realize that some of this trash is necessary. We can call that group *garbage*. After all, we live in a throwaway society where products come in wrappers and packaging that has to be discarded. Other things on the list, however, represent trash that is carelessly tossed into the open without being put in trash containers. We can call that list *litter*.

3 How does *litter* differ from *garbage* according to Paragraph 2?

- A Garbage includes food products and litter doesn't.
- B Garbage can be recycled and litter can't.
- C Garbage is necessary trash thrown away properly and litter isn't.
- D Litter is necessary trash thrown away properly and garbage isn't.

Hook: What is the relationship between the following situations?

Ms. Weaver exercises 3-4 times a week.	Ms. Weaver loses 10 lbs. in 3 months.
A KIPPster reads for 30 minutes every night.	That KIPPster meets their AR goal for the quarter.

Directions: P.O.W.E.R. "Missing in Action" and "Protein Problems".

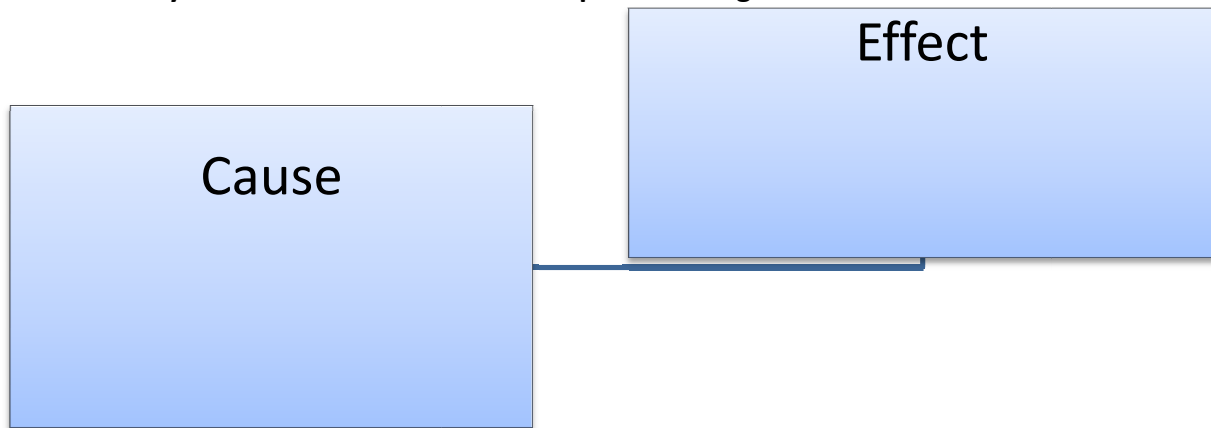
P: What is pictured in the "In the Lab" section?	
O: What does "Missing in Action" usually refer to? Do you think that the heading "Protein Problems" is positive and negative?	
W: What is insulin?	
E: What may cause problems in your body?	
Read, baby, read	

CW#3

Reading

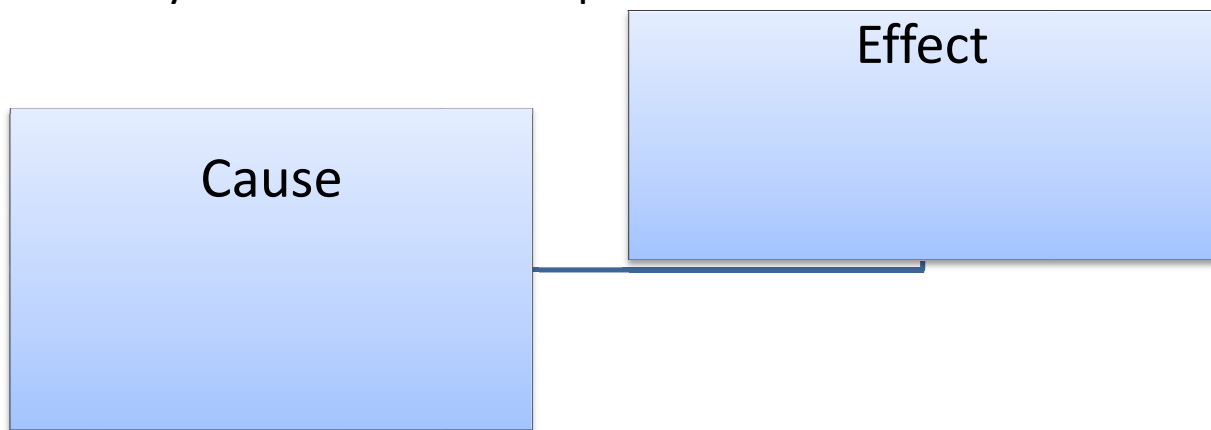
Work hard. Be nice.

Directions: Identify a cause and effect relationship in “Missing in Action”.



Exit Ticket

Directions: Identify a cause and effect relationship in “Protein Problem”.



CW#4

Reading

Work hard. Be nice.

Hola! 😊 Stretch

Directions: Answer the following question

How does a cause and effect organizational pattern help you identify the main idea of “Missing in Action” and “Protein Problems”?

- The author is helping the reader understand that problems with proteins can cause problems with your DNA.
- The author is helping the reader understand that your diet can cause problems with your DNA.
- The author is helping the reader understand how DNA deletions can cause problems.
- The author is helping the reader understand that DNA is important to your life.

Hook: Listen and read the lyrics of “(Insert popular song here)”. Answer the following questions.

Why did the _____ write this song?

What does the writer want me to learn?

What information is most important for my understanding of this song?

What information is interesting, but not important to my understanding?

Let’s read “Making Copies” and annotate to help determine importance.

Step 1. Highlight the entire article with the colors green, yellow, and pink.

- Green= “Go!” I should keep going (reading) because I don’t need this information to understand the purpose of the article.
- Yellow= “Caution!” I should slow down my reading because this might be important to understanding the purpose of the article.
- Pink= “Stop!” I should stop and pay close attention to this information because it will help me determine the purpose of the article.

Step 2. Note-It (Jot down notes using what you highlight from each section)

- “Stop” Notes = What is the most important information I read that will help me understand the article.

- _____
- _____
- _____
- _____

• _____

2. "Caution" Notes= What are some pieces of information that I might need?

- _____
- _____
- _____
- _____
- _____

3. "Keep Going" Notes= What are some pieces of information that are just interesting to me?

- _____
- _____
- _____
- _____
- _____

Directions: Draw the DNA replication process in the space below.

Did you understand "Making Copies"?

Write a summary of pages 14-17. Be sure to use your own words. Use a dictionary/glossary to help you paraphrase.

Criteria for Success

- ✓ Five complete sentences YES NO
- ✓ Use the following words: **DNA, base, untwist and replicate.** YES NO

Sequential Summary Frame

In order to for _____ to _____ it must follow these steps. First, _____.
Then, _____. Next, _____. Finally, _____.

CW#4

Reading

Work hard. Be nice.

Exit Ticket

Directions: Answer the following question.

Criteria for Success

- | | | |
|---------------------------------|-----|----|
| ✓ Two complete sentences | YES | NO |
| ✓ Information from "Stop" notes | YES | NO |
| ✓ Text structure | YES | NO |

How did knowing the text structure help me determine what was important?

CW#5

Reading

Work hard. Be nice.

Hola! 😊 Stretch

Directions: Match the text feature with the definition.

- | | |
|--|--|
| <ul style="list-style-type: none">• caption• heading• title• subtitle | <ul style="list-style-type: none">• sentence or phrase that describes the main idea of a text• paragraph or sentence that describes a picture.• sentence or phrase that explains or elaborates on the title• sentence or phrase that describes the main idea of a paragraph or section of text. |
|--|--|

HOOK: Music!

Label: _____	Label: _____
Similarities:	Similarities:

Music was important to Ms. Weaver’s studying time in college. It relates to her need to have noise while she studying. One main characteristic of the music is acoustic guitar. It is a calming sound. Another key characteristic is the sound of the singer. Ms. Weaver needs a strong singer to drown out the other sounds around her. An example of this is “Hey Ho” by The Lumineers.

Let’s read “Blueprint of Life” and annotate to help determine importance.

Step 1. Highlight the entire article with the colors green, yellow, and pink.

- Green= “Go!” I should keep going (reading) because I don’t need this information to understand the purpose of the article.
- Yellow= “Caution!” I should slow down my reading because this might be important to understanding the purpose of the article.
- Pink= “Stop!” I should stop and pay close attention to this information because it will help me determine the purpose of the article.

Step 2. Note-It (Jot down notes using what you highlight from each section)

1. “Stop” Notes = What is the most important information I read that will help me understand the article.

- _____
- _____
- _____
- _____
- _____

2. “Caution” Notes= What are some pieces of information that I might need?

- _____
- _____

- _____
- _____
- _____

3. "Keep Going" Notes= What are some pieces of information that are just interesting to me?

- _____
- _____
- _____
- _____
- _____

Did you understand "Blueprint of Life"?

Directions: Write a summary of "Blueprint of Life". Be sure to use your own words. Use a dictionary/glossary to help you paraphrase.

Criteria for Success

- ✓ Five complete sentences YES NO
- ✓ Use the following words: study, DNA, chromosome, cell YES NO

Description/Classification Summary Frame

The _____ (word/concept) is important to _____ (subject). It relates to _____ (category or big idea it belongs to). One main characteristic of is _____ (word/concept). Another key characteristic is _____. An example of this is _____ (word/concept).

CW#5

Reading

Work hard. Be nice.

Let's read "Twin Studies" and annotate to help determine importance.

Step 1. Highlight the entire article with the colors green, yellow, and pink.

- Green= "Go!" I should keep going (reading) because I don't need this information to understand the purpose of the article.
- Yellow= "Caution!" I should slow down my reading because this might be important to understanding the purpose of the article.
- Pink= "Stop!" I should stop and pay close attention to this information because it will help me determine the purpose of the article.

Step 2. Note-It (Jot down notes using what you highlight from each section)

1. "Stop" Notes = What is the most important information I read that will help me understand the article.

- _____
- _____
- _____
- _____
- _____

2. "Caution" Notes= What are some pieces of information that I might need?

- _____
- _____
- _____
- _____
- _____

3. "Keep Going" Notes= What are some pieces of information that are just interesting to me?

- _____
- _____
- _____
- _____

CW#5

Reading
_____, _____, _____
Work hard. Be nice.

Exit Ticket

Directions: Write a summary of "Twin Studies". Be sure to use your own words. Use a dictionary/glossary to help you paraphrase.

Criteria for Success

- ✓ Five complete sentences YES NO
- ✓ Use the following words: **DNA, twins, disease, India.** YES NO
- ✓

Description/Classification Summary Frame

The _____(word/concept) is important to _____(subject). It relates to _____(category or big idea it belongs to). One main characteristic of is _____(word/concept). Another key characteristic is _____. An example of this is _____ (word/concept).

CW#6

Reading

Work hard. Be nice.

“When given the choice between being right or being kind, choose kind.” —Dr. Wayne Dyer- *Stretch*

Directions: Answer the following questions using “Twin Studies”.

1. The reader can infer that scientists study many sets of twins, because...
 - a. the scientists may need report their findings.
 - b. the scientists need a large number of twins to make sure their findings are valid.
 - c. the scientists need a large number of twins to see the differences.
 - d. The scientists need many sets of twins to study rheumatoid arthritis.

Directions: Take your notes from CW#5. We are going to make sure that you understand the difference between what’s important to you and what’s important to the author. Look closely at your notes and rewrite them into the correct box in the graphic organizer below.

What’s important to me?	What’s important to the author?

How do we know what’s important to the author?

We know what’s important to the author, because s/he includes _____

_____.

Directions: Read pages 36 and 37 of “DNA in our Lives”. Divide the information from the text into the two boxes below.

What’s important to me?	What’s important to the author?

CW#6

Reading _____, _____, _____ Work hard. Be nice.

Exit Ticket

Directions: Answer the following question.
How do we know what's important to the author?

- Criteria for Success
- ✓ Text feature YES NO
 - ✓ One fact that's important to the author YES NO
 - ✓ At least 2 complete sentences YES NO

We know what's important to the author, because s/he includes

CW#7

Reading

Work hard. Be nice.

“When given the choice between being right or being kind, choose kind.” —Dr. Wayne Dyer- *Stretch*

Directions: Answer the following questions with text evidence from “DNA in our lives”.

1. Which fact was important to me? Why?

2. Which fact was important to the author? Why?

Directions: P.O.W.E.R pages 37-41. You must use one strategy as you are reading, two column notes or the highlighting strategy. Answer the questions on the exit ticket. Staple your text to this classwork.

Criteria for Success

- | | | |
|---|-----|----|
| ✓ Evidence of P.O.W.E.R strategy | YES | NO |
| ✓ Two column notes or highlighting strategy | YES | NO |

What is important to the author?	What is important to me?

Step 1. Highlight the entire article with the colors green, yellow, and pink.

- Green= “Go!” I should keep going (reading) because I don’t need this information to understand the purpose of the article.
- Yellow= “Caution!” I should slow down my reading because this might be important to understanding the purpose of the article.
- Pink= “Stop!” I should stop and pay close attention to this information because it will help me determine the purpose of the article.

Step 2. Note-It (Jot down notes using what you highlight from each section)

1. “Stop” Notes = What is the most important information I read that will help me understand the article.

- _____
- _____

- _____
- _____
- _____

2. "Caution" Notes= What are some pieces of information that I might need?

- _____
- _____
- _____
- _____
- _____

3. "Keep Going" Notes= What are some pieces of information that are just interesting to me?

- _____
- _____
- _____
- _____

Exit Ticket

Directions: Answer the following questions.

1. What is one way that DNA has helped us become more knowledgeable?

2. What can the reader infer about the existence or availability of DNA technology if DNA profiling has helped prove people that were in prison innocent?

CW#8

Reading

Work hard. Be nice.

“When given the choice between being right or being kind, choose kind.” —Dr. Wayne Dyer- *Stretch*

Directions: Answer the following question.

In what ways has the study of DNA helped society?

- Studying DNA has helped us to find causes of diseases.
- Studying DNA has helped us apprehend criminals.
- Studying DNA has helped us identify people.
- All of the above.

Directions: Identify the connection between quotes from *Wonder* and quotes from *DNA*. Explain the connections using the Say Something protocol. Use the following sentence starters to guide your conversation.

Say Something

Make a Connection

- This reminds me of ...
- This part is like ...
- This character (name) _____ is like _____ (name) because ...
- This is similar to ...
- The differences are ...
- I also _____ (name something in the text that has also happened to you).
- I never (name something in the text that has never happened to you).
- This character makes me think of ...
- This setting reminds me of ...

Clarify Something

- Oh, I get it ...
- Now I understand...
- This makes sense now...
- No, I think it means ...
- I agree with you. This means ...
- At first I thought (fill in details) but now I think ...
- This part is really saying ...

Ask a question

- Why did ...
- What's this part about ...
- How is this _____ (detail) like this _____ (detail).
- What would happen if ...
- Why ...
- Who is ...
- What does this session _____ mean.
- Do you think that ...
- I don't get this part here ...

CW#9

Reading _____, _____, _____

Work hard. Be nice.

“Your deeds are you monuments.” - Stretch

Read Paragraph 4. Answer the following question on a notecard and justify your answer.

[4] Have you ever noticed how many cigarette butts you see on the ground? For some insane reason, many smokers who would never think of littering, think nothing of throwing a cigarette butt out the windows of their cars. The Texas Department of Transportation reports that 13% of the trash found along Texas highways is composed of about 130 million cigarette butts. Many smokers mistakenly believe that their cigarette butts biodegrade quickly, but that is not true. The filters in cigarette butts are made of cellulose acetate, not cotton, and they can take decades to degrade. Educational groups are now making an effort to inform the public so that smokers will realize the truth and dispose of their cigarette butts properly.

You can infer from reading Paragraph 4 that the education groups are hoping their public relations campaign will —

- A** cause students to start picking up trash on their playgrounds
- B** cause smokers to stop throwing cigarette butts on the ground
- C** cause smokers to stop smoking
- D** cause smokers to recycle cigarettes

Hook: Inference Match

Directions: match the type of inference the reader needs to make with information from the text.

- problem-solution
- cause-effect
- location
- character trait/feeling
- “The scientist saw defects in his genetic code. His face was like none other.”
- “He stormed out of the room and stomped his feet as his went down the corridor.”
- “Scientist can identify genes that cause diseases.”
- “The flowers bloomed over the fences and birds sang.”

Directions: P.O.W.E.R. “This is a Face of War”. As you read, make inferences.

The reader can infer that Joey Paulk would be reluctant to get rid of all of his scars, because....

The text says...	I know that...	So....

Type of inference: _____

Directions: Continue to make inferences to answer the questions above each chart.

The reader can infer that Paulk lost 50 pounds in four weeks, because....

The text says....	I know that....	So...

Type of inference: _____

The reader can infer that "that moon wasn't this moon" means that....

The text says...	I know that....	Inference

Type of inference: _____

Exit Ticket

Directions: Fill in an inference chart for the following question and select the correct answer.

The text says...	I know that....	Inference

Type of Inference: _____

What can you infer about the speaker of the poem "Let Me Tell You Things"?

- Ⓐ He was forced to come home.
- Ⓑ He doesn't want to be a soldier anymore.
- Ⓒ He is deeply troubled by his war experiences.
- Ⓓ He is an astronomer.

CW#10

Reading

_____, _____, _____
Work hard. Be nice.

"Have no friends not equal to yourself." —Confucius- Stretch

Direction: Complete the following analogy.

flashbacks: PTSD:: _____ : flu

- a. scratch
- b. fever
- c. wound
- d. headache

Hook: "This is a Face of War" vs. *Wonder*

Directions: Create a Venn Diagram comparing and contrasting "This is a Face of War" and *Wonder*.

Directions: Reread "This is a Face of War" with a partner and complete the say something chart. After reading, add at least two differences and two similarities to your Venn Diagram above.

Page #	Name of Speaker	Copy the sentence stem from the exit ticket	Write what your partner says

Directions: Make a connection between “This Is a Face of War” and *Wonder*. Use the following sentence stems.

Make a Connection

- This reminds me of ...
- This part is like ...
- This character (name) _____ is like _____ (name) because ...
- This is similar to ...
- The differences are ...
- This character makes me think of ...
- This setting reminds me of ...

Criteria for Success

- | | | |
|--|-----|----|
| ✓ Text evidence from <i>Wonder</i> | YES | NO |
| ✓ Text evidence from “This is a Face of War” | YES | NO |
| ✓ Explanation of connection | YES | NO |

CW#11

Reading

Work hard. Be nice.

"Your deeds are you monuments." - Stretch

Pick a text that looks interesting to you from the center of the table.

Expository Text Poster

Directions: Create a poster that teaches your teammates about an organizational pattern. Staple this piece of paper to your poster.

Criteria for Success

- | | | |
|--------------------------|-----|----|
| ✓ Example Text | YES | NO |
| ✓ Organizational Pattern | YES | NO |
| ✓ P.O.W.E.R. | YES | NO |

How does the author organize a text to highlight the main idea?

CW#11

Reading

Work hard. Be nice.

"Your deeds are you monuments." - Stretch

Pick a text that looks interesting to you from the center of your table.

Expository Text Poster

Directions: Create a poster that teaches your teammates about an organizational pattern. Staple this piece of paper to your poster. Answer the following question.

Criteria for Success

- | | | |
|--------------------------|-----|----|
| ✓ Example Text | YES | NO |
| ✓ Organizational Pattern | YES | NO |
| ✓ P.O.W.E.R. | YES | NO |

How does the author organize a text to highlight the main idea?

CW#12

Reading

Work hard. Be nice.

"Have no friends not equal to yourself." —Confucius- Stretch

List four ways to determine importance. (Hint: Think about P.O.W.E.R.)

1. _____ 2. _____ 3. _____ 4. _____

Hook: Four Corners-Should we allow people to make changes to DNA?

Directions: P.O.W.E.R the text below

They're Back! Long-extinct species are not quite back, but scientists may soon be able to re-create the creatures. Should they?

May 03, 2013 By TFK Staff

Each year, an estimated 10,000 to 100,000 animal species die off. They join the countless species that have gone extinct over the course of Earth's history—and extinction means forever.

At least it used to. Scientists are now closing in on the ability to bring back extinct species. No, this doesn't mean the plot of Jurassic Park is going to become a reality. Researchers need DNA to bring back a species. DNA is the chemical that carries the structure for a living thing. Dinosaurs have been gone too long for any of their DNA to remain in fossils.

But there's a very real chance that we will be able to bring back more recently extinguished species. This could even include Ice Age animals like the woolly mammoth. In 2003, a team of Spanish and French scientists re-created the Pyrenean ibex, which had gone extinct three years earlier. The new animal didn't survive long, but scientific advances should improve the success rate. In January, Australian scientists announced that they were on their way to bringing back the gastric brooding frog.

Correcting Mistakes

Just because we can bring species back doesn't mean that we should. There may be benefits to reviving a species. But there's no way to know how it will turn out. For example, would a passenger pigeon fit into its old habitat? Or might it crowd out existing species?

Environmentalists worry that our ability to bring species back might cut down support for the hard work of traditional conservation. Why worry about preserving a wildlife habitat or fighting poachers if we know we can just reverse our mistakes?

But those extinctions are our mistakes to correct, which may give us an obligation to do so. As businessman and environmentalist Stewart Brand recently said, "Humans have made a huge hole in nature. We have the ability now ... to repair some of that damage."

We would do well to remember the lesson of Jurassic Park: Proceed with caution. And maybe leave the velociraptors be.

Directions: Complete the Facts-Questions-Response chart.

Facts	Questions	Response

Exit Ticket

Directions: Answer the following question.

Should the scientists be allowed to use DNA to bring back recently extinct animals?

Criteria for Success

- ✓ Evidence from "They're Back"
- ✓ Your opinion

YES NO
YES NO

Reading
Work hard. Be nice

"Have no friends not equal to yourself." —Confucius- Stretch

Directions: Match the titles of the texts to the author's purpose.

- | | |
|---|--|
| <ul style="list-style-type: none"><input type="radio"/> inform<input type="radio"/> persuade<input type="radio"/> entertain | <ul style="list-style-type: none"><input type="radio"/> <i>Wonder</i><input type="radio"/> "This is a Face of War"<input type="radio"/> "Should we let people change their DNA?" |
|---|--|

Expanding Author's Purpose

- Wonder: The author is trying to _____ the reader _____

- "This is a Face of War": The author is trying to _____ the reader
that _____
- "Should we let people change their DNA?": The author is trying to _____ the reader

Directions: P.O.W.E.R the text at each station and determine the purpose.

Title	Purpose	Text Feature that supports your purpose.

Exit Ticket

Directions: On a separate note card, write a STAAR-style question that asks about the purpose of a text of your choice. Write the answer choices.

CW#14

Reading

Work hard. Be nice.

"Have no friends not equal to yourself." —Confucius- Stretch

Directions: Respond to the following question.

Should we allow people to make changes to their own DNA?

Directions: Collect evidence to support or challenge the question.

	Should we allow people to make changes to their own DNA?	
	Pro	Con
Evidence from Wonder		
Evidence from _____		
Evidence from _____		

Make a connection between a quote from Wonder and an expository text in the graphic organizer below.

What should Mrs. Pullman do?

You are one of Mrs. Pullman's doctors and you're advising her during her pregnancy with August Pullman.

This is an important moment in history. As we speak, people are debating the parents' rights to alter or change their unborn child's DNA.

You took a sample of her son's, August Pullman, DNA and studied his genes and found that the baby would be born with a facial deformity. You use facts about DNA, evidence from *Wonder*, and evidence from other expository texts on DNA to persuade Mrs. Pullman to alter or not to August's DNA. You will focus your research using the following essential question: Should we allow people to make changes to their DNA? You will present a graphic organizer showing the connections between quotes from *Wonder* and *DNA* and notecards to guide you through your presentation.

Directions: Everyone will speak!

1. Make sure everyone on your team has a responsibility:

- 2 Writers – will draft, edit, and finalize the written arguments. Must complete note cards with the speakers and any necessary explanations for the visuals.
- 2 Illustrators – will complete the graphic organizer to enhance understanding of their position 1 Writer

2. You have today and next class to work with your team and prepare EVERYTHING. This is your only work time. The trial will take place on _____ . DO NOT BE ABSENT!!

3. Format for presentation day:

- Opening statement
- Presentation of facts/evidence
- Questions – Mrs. Pullman (Ms. Weaver) will ask questions

4. BE CREATIVE! This is your presentation. Feel free to put any spins on this that you can. Pay attention to this rubric, but surprise me with your creativity and awesome ideas!

“What should Mrs. Pullman do?” Rubric

You will be graded on the following:	Beginning	Approaching Expectations	Meets Expectations	Exceeds Expectations
1. Presentation	Group fails to speak clearly. One person speaks for the group.	Some members of the group speak clearly. Most members of the groups speak	Group members speak at an appropriate level. Every member speaks at least once.	Group members speak at an appropriate level. Every member of the group speaks twice. Group incorporates a creative aspect.
2. Note cards (turn in)	Notecards have zero or one quote from <i>Wonder</i> or from an expository text.	Notecards have 2 quotes or lack opening statements.	Notecards have an opening statement, 3 quotes from <i>Wonder</i> , and 3 quotes from an expository text.	Notecards have an opening statement, 3 quotes from <i>Wonder</i> , and from an expository text, and a closing statement.
3. Graphic Organizer (turn in)	Graphic organizer is has zero or one quote and connection.	Graphic organizer lacks quotes or clearly explained connections.	Graphic organizer features clearly explained connections, 3 quotes from <i>Wonder</i> , and 3 quotes from an expository text.	Graphic organizer features clearly explained connections, 3 quotes from <i>Wonder</i> , and 3 quotes from an expository text. Graphic organizer illustrates connection.

Theme in Bottle

Students will write a letter explaining what a character from *Wonder* learned from that character's point of view. The character has decided to send a message in a bottle or some other appropriate container. Students will decorate their container with symbols and scenery appropriate to *Wonder* and its theme. This letter should express a character's feelings about the life lessons he or she has learned. At the beginning of the letter students will state the theme. In the body of the letter, students will incorporate three points that support their ideas. The bottle they create will be given to a student in another class who will judge if they presented three points that connect to the theme.

You will be graded on the following:	Beginning	Approaching Expectations	Meets Expectations	Exceeds Expectations
1. Theme	Not written on the outside of the bottle.	Theme is too specific, may contain character names or specific situations from the book.	Theme clearly represents the story.	Theme clearly represents the story and uses creative language.
2. Letter	Letter doesn't express the character's feelings about the life lesson. Theme is not represented in the letter. There aren't any points that support the theme.	Letter unclearly expresses character's feelings about the life lesson. Theme is at the beginning. There are 1-2 points that support the theme.	Letter expresses the character's feelings about the life lesson he or she learned. Theme is at the beginning. There are three points that support the theme.	Letter is written from any character's point of view besides the main character. Theme is at the beginning. There are more than three points that support the theme.
3. Symbols	There are not symbols on the outside of the bottle.	There are 1-2 symbols on the outside of the bottle. Connection to the theme may not be clear.	There are three symbols on the outside on the bottle. Connection to the theme is clear.	There are more than three symbols on the outside of the bottle. There may be some 3D aspects added.

Could Bats Cure Cancer?

Studying these high-flying mammals may give scientists the key to fighting deadly diseases in humans

By [Sara Goudarzi](#) | January 31 , 2013

Source: Scholastic News Online

Bats are impressive critters. They are known to carry dangerous diseases like Ebola and SARS but somehow avoid getting infected by the viruses themselves.

So researchers wanted to know: How do bats fight off so many deadly diseases? Learning their secret could help doctors better treat humans who have these diseases, thereby saving millions of lives.

To solve this puzzle, a team of researchers from Australia and China analyzed bat **DNA**. DNA is a chemical that acts as a sort of blueprint for a living creature. A creature's DNA may be responsible for traits like skin or hair color. Chunks of DNA that express a certain trait are called **genes**.

The scientists studied two kinds of bats—the Australian megabat, known as the flying fox, and the Chinese microbat. The scientists then sequenced the bat **genome** (the complete arrangement of DNA) by comparing the DNA of both species.

The researchers now think that the special immunity to illness that bats have may be connected to their ability to fly.

THE FLYING GENE

Bats are the only mammals that can truly fly. Flying uses up a lot of energy. The energy burned for flying produces particles in the animal called free radicals. Free radicals can damage DNA and lead to diseases such as cancer.

However, bats are unaffected by free radicals produced during flight. The reason is that bats carry unique genes to deal with toxins and repair any damaged DNA.

SUPERIMMUNITY

Scientists suspect that because bats fly and generate free radicals, they've evolved to carry genes that shaped their unique immune system.

“We're proposing that the evolution of flight led to a sort of spillover effect, influencing not only the immune system, but also things like aging and cancer,” says Chris Cowled, of the Commonwealth Scientific and Industrial Research Organisation's Australian Animal Health Laboratory. “We think we've really found something special.”

Researchers believe that this discovery might one day be key to helping humans fight diseases such as cancer that attack the immune system and damage DNA.

Designer DNA: Should we be able to reprogram our genes?

- Story Highlights
- We ask, to what extent should we be able to alter our own DNA?
- Ray Kurzweil: Reprogramming DNA could expand human potential
- Human Genetics Alert says could lead to genetic discrimination, social issues
- What do you think? Post your views in the Sound Off box below.

(CNN) -- This month, Just Imagine focused on the future of nature and the ways in which it can inspire solutions to some of the greatest challenges facing humanity today.

Yet as scientists gain a greater understanding of biological processes, they're also learning how to manipulate them, including the very essence of what makes us human -- our DNA.

Biotechnology advances are already helping scientists find groundbreaking ways to create personalized medicine, detect illnesses and eradicate disease.

And this, according to futurist Ray Kurzweil, is only the beginning. In the future, humans will be able to reverse the aging process, replace dying organs with younger ones grown from an individual's own DNA and even genetically engineer unborn children, he said.

But some, like the UK-based group Human Genetics Alert, worry the ability to reprogram our biochemistry could lead mankind into unknown territory with dangerous ramifications for the future, including genetic discrimination and even a redefinition of what it means to be human.

We want to hear your views. To what extent should we be able to alter our genetic makeup? Should there be a limit? And how should it be determined exactly what that limit is?

DNA Detective

When crime threatens rare animals, a scientist turns sleuth to crack the case

By Jacqueline Adams | May 8, 2006

A U.S. Fish and Wildlife Service officer was at the crime scene: John F. Kennedy International Airport in New York City. He'd just seized a shipment of handbags and shoes he suspected were made from skins of a threatened species of crocodilian. Importing products made from legally protected animals is against the law without a permit.

But the importer claimed the officer had it all wrong. He insisted that the products came from an unprotected animal species with a similar skin pattern as the endangered crocodilian. The officer didn't buy the importer's claim, but he lacked evidence to prove his hunch. Would the importer get away with the crime?

For help, the officer turned to George Amato, a *conservation geneticist* who studies natural history and endangered species. When the need arises, his genetics lab at the American Museum of Natural History in New York City becomes a *forensics* lab for studying crime-scene evidence. Could he crack the case?

DNA Detective

When the evidence—crocodilian handbags—arrived at his lab, Amato wasn't fazed by the importer's claim that skins from different species look alike. He knew for sure he would be able to identify the animal that was used to make the handbag. That's because skin cells, like all body cells, contain the animal's *DNA*, or hereditary information. DNA is made of four different chemicals called *nucleotides*, which can string together in billions of different sequences. Every species has a unique DNA sequence for certain *genes* (units of hereditary material). So if Amato could read the sequence, he'd prove which croc had been bagged.

Fortunately, he wouldn't have to read the entire sequence, which contains 2.5 billion nucleotides. He could find the information he needed in a short DNA section called the *barcode region*. This section of DNA works like the black and white barcodes on products sold in stores. Store scanners can identify billions of different items based on how a few bars are arranged. Likewise, says Amato, "A relatively small piece of DNA from a particular region has enough differences that it effectively acts like a product barcode for species."

Cracking the Code

After Amato extracted DNA from the skin cells that made up the crocodilian handbag, he started a chemical reaction that built copies of the barcode region. Multiple copies made it easier for a machine called a *DNA sequencer* to read the code. This ability to *amplify*, or copy, DNA means that scientists can read the barcode even if they have only a tiny piece of the animal. In fact, Amato has solved cases in which the only crime scene evidence was a single hair. "Theoretically, all I need is one cell," he says. "That's why this technology is so powerful for forensics."

Once he had the barcode sequence, he needed to determine to which species it belonged. He searched a computer database of sequences and found a perfect match—the Yacare caiman, a threatened species of South American crocodilian! Amato phoned the U.S. Fish and Wildlife Service officer, who then started a criminal investigation against the importer.

Researchers hope to someday develop portable equipment for reading DNA barcodes right at the crime scene. Amato says, "This will be something similar to the way you scan a barcode at a grocery store." That would enable officers to identify and arrest importers of threatened species on the spot.

Meanwhile, Amato's lab tackles 20 to 25 wildlife CSI cases each year. The illegal products he has helped keep off the market include seal skins, shark fins, and whale and monkey meat. When the results come in, he has mixed feelings. "On one hand, it's sad to know that an endangered or protected animal was illegally harvested," he says. "On the other hand, it is rewarding to play a role in closing down that illegal activity."

Is There a Gene for Sports?

Scientists are using tests to see if some genes can help kids become better athletes

By [Zach Jones](#) | July 14 , 2011

Source: Scholastic News Online

Have you ever heard an adult say that a tall kid may grow up to be a great basketball player? Or that your strong arms mean you could swim very fast, or that long legs will let you score soccer goals like a champion?

But what if you knew for sure which sport your body would be best at playing? Would you want to know?

Atlas Sports Genetics is the first U.S. company to examine a person's **genes** to learn more about potential athletic skills. Genes are part of the cells of all living things. Passed from parents to their children, they are a sort of code that determines how you look and the way you grow, and many other characteristics as well.

A GENE FOR SUCCESS

The company takes a tiny sample of cells from inside a person's mouth. At a testing lab, scientists then look for a single gene that produces a protein called ACTN3. This protein can help give muscles a big boost of energy when needed, like when an athlete swings a baseball bat or makes a swift run to try to score a goal.

There are two types of ACTN3, called R and X. Having more of R could make you more capable of spurts of high energy needed for sprinting in football or soccer. Having more of X could mean you might be better at endurance sports, such as swimming or cross-country running.

Some parents are using the test to determine if their children might have a future in professional sports. They want to find out whether their children have the right stuff to be successful as an athlete.

WHAT ABOUT THE FUN?

But some people think that this kind of genetic testing of children is a bad idea. They argue that even if these tests provide useful data, the information solves only part of the puzzle as to why some people excel at certain sports.

Hundreds of genes—like those that influence eye-hand coordination, speed and intelligence—can influence a person's success in a particular sport. In addition, many factors beyond genetics play a part in athletic success. Social skills like teamwork are important. And what about passion, commitment, and practice, practice, practice?

Not everyone plays sports to go pro, either. Many of them play to stay fit and healthy or just for fun, leaving some sports fans to wonder: What's so fun about finding out whether you can win the game before you even start playing?