

ARTS IN MOTION CHARTER SCHOOL | 9th Grade Biology CURRICULUM MAP

Projects	Essential Questions	Enduring Understandings	Cognitive Skills	CCSS	Final Product
<p>Evolutionary Story of a Living Thing</p>	<ul style="list-style-type: none"> • HOW and WHY do living things change over time? • How do we know living things change over time - what is the evidence? 	<ul style="list-style-type: none"> • All organisms gradually evolve over time to better adapt to the environment they live in through the process of natural selection. • Over the course of Earth's 4.6 billion year history, our planet's environments have changed therefore the organisms that live on Earth have also changed. • This means every organism living today is related to ancient ancestors that lived thousands to millions of years ago that look physically different from the organisms we see living today. 	<ul style="list-style-type: none"> • Multimedia in Oral Presentation • Oral Presentation 	<ul style="list-style-type: none"> • NGSS.HS-LS4-1 • NGSS.HS-LS4-2 • NGSS.HS-LS4-3 • NGSS.HS-LS4-4 • NGSS.HS-LS4-5 	<ul style="list-style-type: none"> • Final Presentation • Visual Timeline
<p>Ethics of E-waste</p>	<ul style="list-style-type: none"> • How can we use living things to clean up the toxins from our electronics (e-waste)? • How can humans reverse the damage they do to the environment? 	<ul style="list-style-type: none"> • Your electronics like cell phones, computers, & TVs contain chemicals such as zinc, copper, lead, & mercury which are toxic to humans and damage our environment. • Fast plants can be used to remove these toxins from our environment, which is an example of bioremediation. • As an electronics owner, you have a responsibility to find ways to reduce the negative impact of your electronics on your health and the environment. 	<ul style="list-style-type: none"> • Discussion / Contribution • Norms / Active Listening • Preparation 	<ul style="list-style-type: none"> • NGSS.HS-ESS1-1 • NGSS.HS-ESS1-2 • NGSS.HS-ESS1-3 	<ul style="list-style-type: none"> • E-Waste Socratic Discussion
<p>Bioremediation</p>	<ul style="list-style-type: none"> • How can we use plants to clean up the toxins from human activity? • How can humans reverse the damage they do to the environment? 	<ul style="list-style-type: none"> • Your electronics like cell phones, computers, & TVs contain chemicals such as zinc, copper, lead, & mercury which are toxic to humans and damage our environment. • Fast plants can be used to remove these toxins from our environment, which is an example of bioremediation. • As an electronics owner, you have a responsibility to find ways to reduce the negative impact of your electronics on your health and the environment. 	<ul style="list-style-type: none"> • Asking questions • Designing Processes and Procedures • Explanation of Evidence • Hypothesizing • Identifying Patterns and Relationships • Interpreting Data/Info • Introduction and Conclusion • Making Connections & Inferences • Style and Language (Tone, Academic Language, Syntax) 	<ul style="list-style-type: none"> • NGSS.HS-ESS2-6 • NGSS.HS-ESS2-7 • NGSS.HS-ESS3-1 • NGSS.HS-ESS3-6 	<ul style="list-style-type: none"> • Bioremediation Lab Report
<p>Scientific Discoveries</p>	<ul style="list-style-type: none"> • How does a scientific discovery or event impact your life or the 	<ul style="list-style-type: none"> • Scientists constantly discover new and exciting things that impact our lives. • It is our responsibility as informed citizens 	<ul style="list-style-type: none"> • Critiquing the Reasoning of Others • Multimedia in Oral 	<ul style="list-style-type: none"> • NGSS.HS-ESS2-7 	<ul style="list-style-type: none"> • Final Presentation and Google Powerpoint

	<p>history of our communities?</p> <ul style="list-style-type: none"> How do you decide if a scientific discovery is trustworthy and supported by good evidence? 	<p>to be aware of the history of science and of recent scientific discoveries that impact our communities.</p>	<p>Presentation</p> <ul style="list-style-type: none"> Oral Presentation Selecting Relevant Sources 		
<p>DNA Barcoding</p>	<ul style="list-style-type: none"> How can I use DNA Barcoding to determine if a store and/or restaurant in my community is telling the truth about the seafood they sell? 	<ul style="list-style-type: none"> All organisms have DNA. This DNA includes a specific gene called the CO1 gene (or the rbcL gene in plants) that can be "barcoded." Barcoding DNA essentially means to read the genetic material. The CO1 gene in animals and the rbcL gene in plants are specific to each living organism that exists! We can identify any living species through the use of DNA barcoding. 	<ul style="list-style-type: none"> Asking questions Designing Processes and Procedures Explanation of Evidence Hypothesizing Identifying Patterns and Relationships Interpreting Data/Info Introduction and Conclusion Making Connections & Inferences Style and Language (Tone, Academic Language, Syntax) 	<ul style="list-style-type: none"> NGSS.HS-LS1-1 NGSS.HS-LS1-2 NGSS.HS-LS1-3 NGSS.HS-LS4-4 	<ul style="list-style-type: none"> Lab Report
<p>Genetic Counselor</p>	<ul style="list-style-type: none"> What are the chances of us having the same traits as our parents? What are the chances that our kids will have the same traits as us? 	<ul style="list-style-type: none"> Certain diseases (like cystic fibrosis) are inherited from your parents and not caught (like the flu). These diseases are inherited in different ways (sex-linked, dominant, recessive). Animals (like fruit flies) can be used for genetic experiments to figure out inheritance in humans. 	<ul style="list-style-type: none"> Discussion / Contribution Making Connections & Inferences Modeling Norms / Active Listening Preparation Style and Language (Tone, Academic Language, Syntax) 	<ul style="list-style-type: none"> NGSS.HS-LS3-1 NGSS.HS-LS3-2 NGSS.HS-LS3-3 	<ul style="list-style-type: none"> Letter to Clients

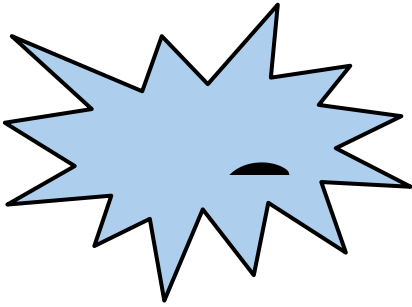
ARTS IN MOTION CHARTER SCHOOL | 9th Grade Biology UNIT PLAN

Project	Evolutionary Story of a Living Thing
Suggested Time	<ul style="list-style-type: none"> ● 5 Weeks
Essential Questions	<ul style="list-style-type: none"> ● HOW and WHY do living things change over time? ● How do we know living things change over time - what is the evidence?
Enduring Understandings	<ul style="list-style-type: none"> ● All organisms gradually evolve over time to better adapt to the environment they live in through the process of natural selection. ● Over the course of Earth's 4.6 billion year history, our planet's environments have changed therefore the organisms that live on Earth have also changed. ● This means every organism living today is related to ancient ancestors that lived thousands to millions of years ago that look physically different from the organisms we see living today.
Cognitive Skills	<ul style="list-style-type: none"> ● Multimedia in Oral Presentation ● Oral Presentation
Focus Areas	<ul style="list-style-type: none"> ● Evidence of Evolution ● Natural Selection and Specialization
CCSS	<ul style="list-style-type: none"> ● NGSS.HS-LS4-1 ● NGSS.HS-LS4-2 ● NGSS.HS-LS4-3 ● NGSS.HS-LS4-4 ● NGSS.HS-LS4-5
Checkpoints	<ul style="list-style-type: none"> ● Find Relevant and Trustworthy Sources ● Make and Evolutionary Timeline ● Create Visual Timeline ● Final Presentation
Final Product	<ul style="list-style-type: none"> ● Final Presentation (See attached Sample) ● Visual Timeline

ARTS IN MOTION CHARTER SCHOOL | 9th Grade Biology LESSON PLAN

Project	Evolutionary Story of a Living Thing	Essential Questions	<ul style="list-style-type: none"> ● HOW and WHY do living things change over time? ● How do we know living things change over time - what is the evidence? 	Final Product	<ul style="list-style-type: none"> ● Final Presentation ● Visual Timeline
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Checkpoint	<ul style="list-style-type: none"> ● Find Relevant and Trustworthy Sources
Cognitive Skills	<ul style="list-style-type: none"> ● Multimedia in Oral Presentation
Objective	<ul style="list-style-type: none"> ● Using a search engine like Google, find at least 3 trustworthy resources that help you to research the evolutionary story of your living thing.
Activities	<ul style="list-style-type: none"> ● Evolutionary Story SDL Plan ● Explore and Choose your Living Thing! ● Why Living Things Change Over Time and How We Know ● Practice According to SOAPStone ● SOAPStone- Audience, Purpose, Tone
Resources	<ul style="list-style-type: none"> ● Checkpoint 1: Example (See attached Sample)
Assessment	<ul style="list-style-type: none"> ● Performance task assessment using cognitive skills (See attached Sample)



Find Relevant Resources

Graded Skill: Selecting Relevant Resources



Directions: Using a search engine like Google, find *at least 3 trustworthy resources* that help you to research the evolutionary story of your living thing. Read and use the below information to help you accomplish this task. For each resource that you decide to use, answer all questions below. When finished, complete the **Self-Assessment** at the bottom of this document to argue for the grade you deserve.

You are being graded on your ability to find resources that . . .

- Answer the essential question of **HOW** and **WHY** your living thing has changed over time
- Are **PRECISE, ACCURATE, and DETAILED**
 - They describe the scientifically accurate (precise) evolutionary story of your living thing
 - They use evolutionary evidence we learned (*DNA, Fossils, Geographical Location, Vestigial Structures, Homologous Structures, Embryos*) to show a relationship between a past ancestor and your living thing
- Are **VALID/CREDIBLE** (Trustworthy)
 - They pass the SOAPSTone test - you are able to identify the Speaker, Occasion, Audience, Purpose, Subject, & Tone

Speaker	Occasion	Audience	Purpose	Subject	Tone
<i>Who is the speaker/ author of this source?</i>	<i>When was the source produced? (How old is it?)</i>	<i>Who is the intended audience of the source?</i>	<i>What is the speaker's purpose or message?</i>	<i>What is the topic?</i>	<i>What is the attitude of the speaker?</i>
<i>example: Dr. Brown</i>	<i>example: 2013</i>	<i>General Public? Students? Doctors? Buyers/Sellers?</i>	<i>To inform /educate? To sell something? To persuade /argue?</i>	<i>example: Organ Donation</i>	<i>Serious? Angry? Sad? Sarcastic? Neutral?</i>

- They meet the description of a **Credible Source** below:



Credible Sources	Non-Credible Sources
<ul style="list-style-type: none"> ● Rarely have advertisements displayed if the source is a website ● The Author or Speaker is respected and well known in their field ● The source is from a credible/trustable institution (<i>ex: Stanford or Department of Justice</i>) ● The Occasion of the source, or date that it was written is/was recent (ex: 2010, 2011, 2013, etc.) ● The intended Audience of the source is either the general public, students, or possibly a professional subgroup like doctors or scientists. ● The Purpose of the source is to inform or educate, or possibly share an opinion. ● The Subject of the source is one that relates to your research topic ● The Tone of the source (or attitude of the author) is either serious or neutral. ● Most likely are a “.edu”, “.org”, or “.gov” if a website 	<ul style="list-style-type: none"> ● Many flashy and colorful advertisements are displayed if the source is a website ● The Author or Speaker is not well known, or has a reputation that is not professional ● The source is from an unknown institution or organization, or one that does not have a professional reputation ● The Occasion of the source, or date that it was written, is long ago - the information included is therefore out of date. ● The intended Audience of the source are most likely non-professionals or people who are reading the source for entertainment ● The mere Purpose of the source is to entertain, to sell something, or to possibly persuade others (very opinionated) ● The Subject of the source is one that does not relate to your research topic ● The Tone of the source (or attitude of the author) is sarcastic, witty, or funny. ● Most likely are a “.com” , “.net” if a website

Before embarking on
to help you:



your research, read the



few research tips below



Research Tips !

- Websites that are usually trustworthy have a web address that ends in either “.edu”, “.org”, or “.gov”
- You can search for these websites by typing into Google : “(name of living thing) site:.edu” or “(name of living thing) site:.org”
 - Take caution with websites that web addresses end in “.com” or “.net”
- The **fewer** the advertisements on the page, the better!
 - Do you see flashy advertisements on the website trying to sell you something? **If so, the website is probably not very trustworthy to use for information.**

Key words/Phrases to Use During your Search

- Try typing into the search box any of the following:
 - “Evolution of _____(name of living thing)_____”
 - “The origin of _____(name of living thing)_____”
 - “Evolution timeline of _____(name of living thing)_____”
 - “Ancient ancestors of _____(name of living thing)_____”

Name of my Living Thing whose evolutionary history I am researching:

Resource # 1

Title of Website: _____

Website address: _____

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	
Occasion:	
Audience:	
Purpose:	
Subject:	
Tone:	

According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

Is this resource **PRECISE, ACCURATE, & DETAILED**? Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	
Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right: <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	
Does this resource talk about the	

evolutionary evidence we learned about in like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical evidence ? What does it say?	
How does the resource prove that the ancestors described are related to your living thing?	
Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?	

In **4-5 sentences, summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

*(your research question is **how** and **why** your living thing has changed over time):*

Resource # 2

Title of Website: _____

Website address: _____

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	
Occasion:	

Audience:	
Purpose:	
Subject:	
Tone:	

According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	
Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right: <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	
Does this resource talk about the evolutionary evidence we learned about like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical	

evidence? What does it say?	
How does the resource prove that the ancestors described are related to your living thing?	
Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?	

In **4-5 sentences**, **summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

*(your research question is **how** and **why** your living thing has changed over time):*

Resource # 3

Title of Website: _____

Website address: _____

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	
Occasion:	
Audience:	
Purpose:	

Subject:	
Tone:	

According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	
Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right: <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	
Does this resource talk about the evolutionary evidence we learned about in like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical evidence ? What does it say?	
How does the resource prove that the	

ancestors described are related to your living thing?	
Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?	

In **4-5 sentences, summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

*(your research question is **how** and **why** your living thing has changed over time):*

Resource # 4

Title of Website: _____

Website address: _____

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	
Occasion:	
Audience:	
Purpose:	
Subject:	

Tone:	
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According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	
Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right: <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	
Does this resource talk about the evolutionary evidence we learned about like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical evidence? What does it say?	
How does the resource prove that the ancestors described are related to your living thing?	

Does this resource describe how a past ancestor was best fit (**adapted**) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?

In **4-5 sentences**, **summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

*(your research question is **how** and **why** your living thing has changed over time):*

Self-Assessment - What Grade do you Deserve for this Skill?

Directions: **Highlight** the rubric below according to the grade you deserve for this checkpoint, then explain in the box why you deserve this grade.

In your explanation, remember to reference:

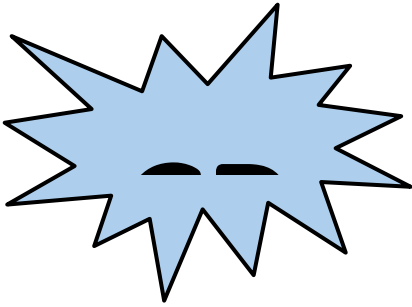
- Language from the specific level of the **rubric** that describes the grade/score you deserve
- **Quotes** taken from your above writing that provide an example of how you meet this grade/score

[Need Help with This? Click Here to See an Example of a Completed Self-Assessment!](#)

	3	3.5	4	4.5	5	5.5	6
Selecting Relevant Sources	Selects sources that are generally relevant to the research topic and mostly credible but may be too broad or too narrow to fully address the research question. Where applicable, sources have some variety in perspective and/or format.		Selects sources that provide sufficient, credible information relevant to the research question. Where applicable, sources vary in perspective and/or format.		Selects sources that provide detailed, credible information relevant to the research question. Where applicable, sources vary in perspective and/or format.		Selects sources that provide detailed, comprehensive, credible information relevant to the research question. Where applicable, sources vary in perspective and/or format.

For the skill of **Selecting Relevant Sources** I deserve the score of _____. I deserve this score because . . .







Practice Presenting!




Graded Skill: Oral Presentation

Presentation Peer Review & feedback

Directions: Find a partner and complete each of the steps below. This practice will provide your partner and yourself with effective feedback that will improve your oral presentation skill.

Step 1: Read the descriptions of the following characteristics that are shown in any excellent presentation in order to understand what to look out for while you peer review your partner's presentation. You and your partner will be graded on each of the characteristics below during your final presentation.

Characteristic	Description
Eye contact	 <p><i>While speaking, your eyes are regularly scanning the audience and making eye contact with several different people</i></p>
Volume	 <p><i>While presenting, your voice is loud enough for the people farthest from you to hear but not too loud so you are hurting the ears of the people closest to you</i></p>

<p>Pronunciation</p>	 <p><i>While speaking, you enunciate each and every word that you say so the information that you are trying to deliver can be understood by every audience member.</i></p>
<p>Talking Speed & Pauses</p>	 <p><i>While presenting, you speak slowly and pause between key points to allow the audience important processing time. You also very rarely say “um” between each of your pauses.</i></p>
<p>Body Posture/Body Movements</p>	 <p><i>During your presentation, you convey a confident and calm body posture. Your body is facing toward the audience, you are standing up straight, and your overall appearance is warm and welcoming. Hand gestures are also used at times to emphasize key points. While presenting, you are using hand gestures just the right amount (too much might be distracting) and the gestures you use are appropriate.</i></p> <p><u>Check out this resource to see examples of useful hand gestures to use during your presentation</u></p>

When finished looking over the excellent presentation characteristics above, watch the following sample presentations to gain an idea of how these characteristics are used in a real presentation. In the box below, take notes on strategies that you and your partner can use during YOUR presentations to make them excellent.

[Sample presentation 1](#)

[Sample presentation 2](#)

[Sample presentation 3](#)

Notes/strategies that I observed in these presentations that I'd like to use:

Step 2: Listen to your partner present and give them a grade for each presentation characteristic using the table below. Use the following scale to grade:

3 (Not Passing)	4 (C)	5 (B)	6 (A+)
Attempted but did not succeed at meeting this characteristic	At times met this characteristic, but needs practice	Mostly used this characteristic	This characteristic was excellent throughout the entire presentation

Characteristic	Rating/Grade	Notes
Eye contact		
Volume		
Pronunciation		
Talking Speed & Pauses		
Body Posture/Body Movements		

Step 3: According to the table above, what are characteristics that your partner needs to

improve? What are characteristics that your partner **excelled at**?

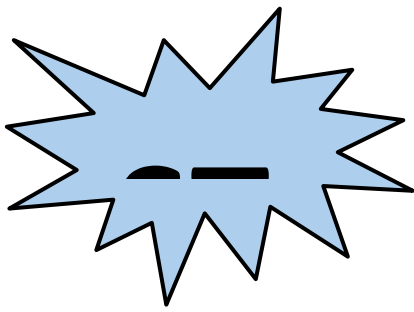
Characteristics that my partner needs to improve:	Characteristics that my partner did great at:

Step 4: Give your partner’s presentation an **overall grade** using the Oral Presentation rubric below (*this is what Ms. Langley will use to grade you during your final presentation*):

3	3.5	4	4.5	5	5.5	6
<p>Attempts to control eye contact, volume, pronunciation, and/or body posture to enhance presentation but may lapse into distracting behaviors at times (too much or not enough eye contact, inappropriate volume, inconsistent pronunciation, or inappropriate body posture--e.g., overly stiff, too much gesticulation).</p>		<p>Uses mostly appropriate eye contact, adequate volume, clear pronunciation, and appropriate body posture (e.g., calm, confident).</p>		<p>Uses consistently appropriate eye contact, adequate volume, clear pronunciation, and appropriate body posture (e.g., calm, confident).</p>		<p>Demonstrates consistent control of eye contact, volume, pronunciation, and body posture. Uses some variation in volume and inflection to emphasize key points. Uses some body movements to enhance articulation.</p>

My Partner’s Overall Presentation Grade is: _____





EXAMPLE



Find Relevant Resources

Graded Skill: Selecting Relevant Resources

Directions: Using a search engine like Google, find *at least 3 trustworthy resources* that help you to research the evolutionary story of your living thing. Read and use the below information to help you accomplish this task. For each resource that you decide to use, answer all questions below. When finished, complete the **Self-Assessment** at the bottom of this document to argue for the grade you deserve.

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Speaker	Occasion	Audience	Purpose	Subject	Tone
<i>Who is the speaker/ author of this source?</i>	<i>When was the source produced? (How old is it?)</i>	<i>Who is the intended audience of the source?</i>	<i>What is the speaker's purpose or message?</i>	<i>What is the topic?</i>	<i>What is the attitude of the speaker?</i>
<i>example: Dr. Brown</i>	<i>example: 2013</i>	<i>General Public? Students? Doctors? Buyers/Sellers?</i>	<i>To inform /educate? To sell something? To persuade /argue?</i>	<i>example: Organ Donation</i>	<i>Serious? Angry? Sad? Sarcastic? Neutral?</i>

- They meet the description of a **Credible Source** below:



Credible Sources	Non-Credible Sources
<ul style="list-style-type: none"> • Rarely have advertisements displayed if the source is a website • The Author or Speaker is respected and well known in their field • The source is from a credible/trustable institution (<i>ex: Stanford or Department of Justice</i>) • The Occasion of the source, or date that it was written is/was recent (<i>ex: 2010, 2011, 2013, etc.</i>) • The intended Audience of the source is either the general public, students, or possibly a professional subgroup like doctors or scientists. • The Purpose of the source is to inform or educate, or possibly share an opinion. • The Subject of the source is one that relates to your research topic • The Tone of the source (or attitude of the author) is either serious or neutral. 	<ul style="list-style-type: none"> • Many flashy and colorful advertisements are displayed if the source is a website • The Author or Speaker is not well known, or has a reputation that is not professional • The source is from an unknown institution or organization, or one that does not have a professional reputation • The Occasion of the source, or date that it was written, is long ago - the information included is therefore out of date. • The intended Audience of the source are most likely non-professionals or people who are reading the source for entertainment • The mere Purpose of the source is to entertain, to sell something, or to possibly persuade others (very opinionated) • The Subject of the source is one that does not relate to your research topic • The Tone of the source (or attitude of the author) is sarcastic, witty, or funny.

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Key words/Phrases to Use During your Search

- Try typing into the search box any of the following:
 - “Evolution of _____(name of living thing)_____”
 - “The origin of _____(name of living thing)_____”
 - “Evolution timeline of _____(name of living thing)_____”
 - “Ancient ancestors of _____(name of living thing)_____”

**Name of my Living Thing whose evolutionary history I am researching:
felines (cats/kittens)**

Resource # 1

Title of Website: Alley Cat Allies

Website address: <http://www.alleycat.org/Page.aspx?pid=1010>

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	Alley Cat Allies organization
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Occasion:	2015
Audience:	general public
Purpose:	to inform
Subject:	natural history of cats
Tone:	objective/neutral/serious

According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

This is a trustworthy source because there were no Ads whatsoever. The speaker, in this case the Alley Cat Allies, are a well known and respected association. The occasion was recent, it was published in 2015. The audience was for the general public, most likely for students. The purpose was to inform not to entertain. The subject related to my topic, it was where cats/felines originated/their history. The tone was was an objective/neutral source. There wasn't sarcasm or humor.

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	Yes, <i>felix silvestris lybica</i> 10,000 to 12,000 years ago
Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right: ● Example of a scientific name: <i>Australopithecus afarensis</i>	<i>felix silvestris lybica</i> <i>felis catus</i>
Does this resource talk about the evolutionary evidence we learned about in Step 2 like fossils, DNA, embryos, vestigial structures, homologous structures , or	Yes, they found archeological evidence. There is artwork in Egypt that shows that they worshiped cats. Around the 4th century AD in Europe, a cat skeleton was found that

geographical evidence? What does it say?	shows the shortened skull of domestic cats today.
How does the resource prove that the ancestors described are related to your living thing?	This proves that the felix silvestris lybica had a similar skull/bones as cats today.
Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?	Many Scientists argue that cats domesticated themselves. They traveled around the globe with people. They served as mousers mainly in ships.
Knowing that most ancestors lived millions of years ago, does this resource describe the environment that the ancestor lived in? What does it say?	They lived along-side people. Throughout history, they have lived outside and in the wild-life. Its food source for middle eastern cats, was catching rodents when they became attracted to stored grain. They lived off of garbage. They have always lived in the outdoors up until recently.

In **4-5 sentences**, **summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

*(your research question is **how** and **why** your living thing has changed over time):*

This source provides credible information that is relevant to my research question because it provides the ancestor of cats which is felix silvestris lybica. It provides how it evolved, which is that they were bound to domesticate themselves. It provides that they evolved because of their surroundings. They found better food sources and they lived amongst humans. It provides that at first they only lived in the outdoors but they changed/evolved into house cats and that now most cats live in homes with humans.

Resource # 2

Title of Website: Bright Hub

Website address: <http://www.brighthub.com/science/genetics/articles/42302.aspx>

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	Robyn Broyles
Occasion:	2009
Audience:	General Public/students
Purpose:	to inform/educate
Subject:	the genetic evolution of cats
Tone:	neutral/serious

According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

This is a credible resource because it passes the SOAPSTONE test. The speaker uses a lot of references and evidence to support their claim, which makes her reliable. The article is recent because it was written in 2009. The purpose of this article is to inform not to entertain or to humor anybody. The topic is the history of the cat and genetic evolution of cats. The tone is serious and objective, it doesn't use sarcasm or humor. Also, this is trustworthy information because the source is from a credible source, it is from Bright Hub and it is known for original articles, and reviews on science, technology, and educational topics. The occasion of the source is fairly recent, since it was written in 2009. The audience is probably for students since it focuses on educational topics. The purpose is to inform not to persuade or to sell. The subject of this source is related to my research topic. The attitude of the source is objective, professional, and serious. It is not humorous.

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	felis silvestris lybica 10,000 to 12,000 years ago
Does this resource use scientific names to describe the names of past ancestors? Write	felis silvestris lybica felis catus

<p>or copy and paste the scientific names that are mentioned to the right:</p> <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	<p>felis silvestris domesticus felis silvestris catus felis domesticus felis silvestris silvestris</p>
<p>Does this resource talk about the evolutionary evidence we learned about in Step 2 like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical evidence? What does it say?</p>	<p>Analysis of feline DNA has changed the view of where and when cats were 2,0000 years ago. Mitochondrial DNA evidence shows that at least five founders- ancestrals whose DNA is present in modern populations.</p>
<p>How does the resource prove that the ancestors described are related to your living thing?</p>	<p>Genetic analysis shows that domestic cats don't breed with their close relatives, which are the wildcats. Genetic analysis shows that all cats evolved from felis silvestris lybica.</p>
<p>Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?</p>	<p>They adapted to their environment because they lived with humans in Ancient Egypt. They ate rodents and trash left by humans, so they adapted to that by eating most of their food. Also they domesticated themselves. Humans accepted them because they looked "cute" with round faces and large eyes.</p>
<p>Knowing that most ancestors lived millions of years ago, does this resource describe the environment that the ancestor lived in? What does it say?</p>	<p>The environment that they lived in was near human settlements and in the outdoors.</p>

In **4-5 sentences, summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

*(your research question is **how** and **why** your living thing has changed over time):*

This source is credible because it provides information about the evolution of felines. It has the names of ancestors and the environment in which they used to live in. IT says that it change over time because they domesticated themselves since they lived near human settlements. Then they lived with humans (egyptians) and lived off of their food.

Resource # 3

Title of Website: Provet Pet Facts

Website address: <http://www.provet.co.uk/cats/evolution%20of%20the%20cat.htm#a>

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	Provet Healthcare Information
Occasion:	2015
Audience:	General public, students, scientists, pet owners
Purpose:	to inform, to educate
Subject:	evidence of cat evolution
Tone:	serious

According to SOAPstone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

This is a trustworthy source because there are no flashy or any ads at all. Only one connecting to their organization. The occasion is recent as it was written in 2015. The audience is for students, researchers because it is for the purpose to educate and inform. The topic is evidence for evolution because it provides a lot of information and evidence about the evolution of cats. The tone is serious.

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?	Creodonts which existed 200 million years ago. It is a reptile and it says that cats originally evolved from reptiles.
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<p>Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right:</p> <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	<p>acinonyx felis creodonts smilodon felis libyca felis silvestris genera (panthera)</p>
<p>Does this resource talk about the evolutionary evidence we learned about in Step 2 like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical evidence? What does it say?</p>	<p>Yes. It says that dental patterns connect cats to reptiles like creodonts. Fossils from 12 million years ago are still similar to modern small cats. It also provides DNA evidence.</p>
<p>How does the resource prove that the ancestors described are related to your living thing?</p>	<p>A rounded head and a skeletal structure designed for agility suggests that all cats evolved from a common ancestor. Cats evolved with eyes that protrude forwards the head giving them good forward and sideways vision. Also, archeologists have found that the felis libyca was with humans because of the skulls found in burial grounds which many people believe is the main ancestor of cats.</p>
<p>Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?</p>	<p>The felis is connected to the smilodon and the genera (panthera) group because of all of the fur which allowed them to use that as camouflage because of the coat colour. Since it is genetically inherited it allows them to hunt for food.</p>
<p>Knowing that most ancestors lived millions of years ago, does this resource describe the environment that the ancestor lived in? What does it say?</p>	<p>2000 years ago there is evidence that cats lived amongst Egyptians because they domesticated themselves and they took them in. Cats were praised religiously and became important symbols. Also, the felis libyca lived in the desert. Many cats, which were mostly wild cats, until they domesticated themselves, lived in the outdoors and lived off of meat since they're carnivores.</p>

In **4-5 sentences**, **summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

(your research question is **how** and **why** your living thing has changed over time):

This is trustworthy information because it provides information on ancient ancestors and who they evolved from which is a reptile (creodonts). It says that they changed by domesticating themselves and because of migration and breeding. It changed because they lived with humans and were praised by Egyptians. They even had their own burial grounds and were seen as religious symbols. They lived off of meat because they're carnivores.

Resource # 4

Title of Website: National Geographic News

Website address: <http://news.nationalgeographic.com/news/2007/06/070628-cat-ancestor.html>

Fill in the SOAPStone information below to prove that your source is trustworthy for information

Speaker:	Brian Handwerk
Occasion:	June 28, 2007
Audience:	General Public, students, researchers
Purpose:	to inform, to educate
Subject:	house cat origin traced to middle eastern wildcat ancestor
Tone:	objective/serious

According to SOAPStone, why do you consider this resource trustworthy? *Explain in at least 4-5 sentences below. Use the description of a **Credible Source** above to help you.*

This is a credible source because it does not have flashy ads. This source is from a trustable institution which is National Geographic. The occasion is recent since it was published in

2007. The audience is the general public, students, or researchers. The purpose is to inform/educate. The subject is relatable to my research topic. The tone of the source is serious/objective.

Is this resource **PRECISE, ACCURATE, & DETAILED?** Answer the questions below to find out:

<p>Does this resource describe past ancestors of your living thing? Write the name of at least one. How many years ago did this ancestor live?</p>	<p>Near Eastern Wildcat between 70,000 and 100,000 years ago.</p>
<p>Does this resource use scientific names to describe the names of past ancestors? Write or copy and paste the scientific names that are mentioned to the right:</p> <ul style="list-style-type: none"> ● Example of a scientific name: <i>Australopithecus afarensis</i> 	<p><i>felis silvestris libyca</i></p>
<p>Does this resource talk about the evolutionary evidence we learned about in Step 2 like fossils, DNA, embryos, vestigial structures, homologous structures, or geographical evidence? What does it say?</p>	<p>There is early archeological evidence which shows the physical and behavioral similarities between the ancient ancestor. Genetics are ways to find out if domestic cats are truly related to wild cats.</p>
<p>How does the resource prove that the ancestors described are related to your living thing?</p>	<p>The sampling of feline genes revealed that the near Eastern Wildcat and domestic cats fell into the same genetic clade.</p>
<p>Does this resource describe how a past ancestor was best fit (adapted) to the environment that it lived in? What did the past ancestor LOOK like? What does it say?</p>	<p>It adapted by domesticating themselves when they went and lived with humans. Farmers were most likely to domesticate wildcats because they were helpful in catching mice and other pests that ruined farm fields.</p>
<p>Knowing that most ancestors lived millions of years ago, does this resource describe the environment that the ancestor lived in? What does it say?</p>	<p>10,000 to 12,000 years ago wildcats were roaming around when humans were settling down to farm.</p>

In **4-5 sentences**, **summarize** your responses above by explaining how this resource provides credible (trustworthy) information that is relevant to your research question.

(your research question is **how** and **why** your living thing has changed over time):

This is trustworthy information because it provides how cats evolved which is that cats domesticated themselves and adapted to human settlements. It also says that they changed because they often moved/migrated from Europe to Africa. They adapted to human food since they lived in the wild but when they migrated they domesticated themselves. They accompanied human tribes when they moved and spread throughout the ancient world.

Self-Assessment - What Grade do you Deserve for this Skill?

Directions: **Highlight** the rubric below according to the grade you deserve for this step, then explain in the box why you deserve this grade.

In your explanation, remember to reference:

- Language from the specific level of the **rubric** that describes the grade/score you deserve
- **Quotes** taken from your above writing that provide an example of how you meet this grade/score

	3	3.5	4	4.5	5	5.5	6
Selecting Relevant	Selects sources that are generally relevant to the research topic and		Selects sources that provide sufficient, credible		Selects sources that provide detailed, credible		Selects sources that provide detailed, comprehensive,

Sources	mostly credible but may be too broad or too narrow to fully address the research question. Where applicable, sources have some variety in perspective and/or format.		information relevant to the research question. Where applicable, sources vary in perspective and/or format.		information relevant to the research question. Where applicable, sources vary in perspective and/or format.		credible information relevant to the research question. Where applicable, sources vary in perspective and/or format.
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*For the skill of **Selecting Relevant Sources** I deserve the score of 5. I deserve this score because the sources provide detailed and credible information and the information is relevant to the research question. For example, I wrote, "This source provides credible information that is relevant to my research question because it provides the ancestor of cats which is felix silvestris lybica. It provides how it evolved, which is that they were bound to domesticate themselves. It provides that they evolved because of their surroundings. They found better food sources and they lived amongst humans. It provides that at first they only lived in the outdoors but they changed/evolved into house cats and that now most cats live in homes with humans." Which answers the research question of how and why my living thing changed over time. Also, the sources vary in perspective and/or format since I picked many different types of sources to support my research question/topic. I also provided 4 sources and not 3.*