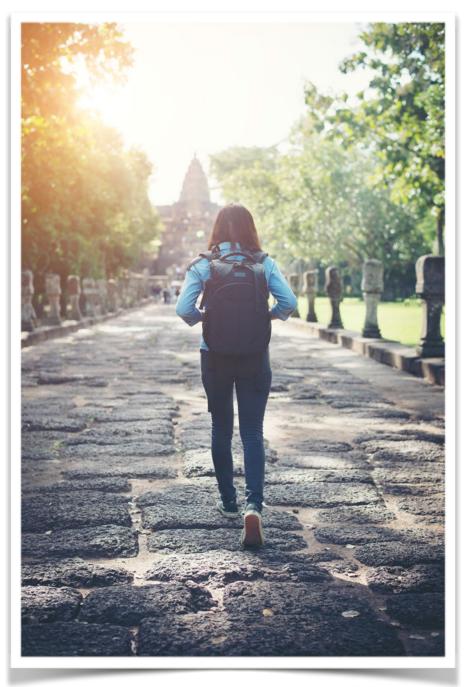
Thinking like an Archeologist



A Grade 7 Ancient Civilizations Inquiry

Doug David, Debbie Nelson, Gail Martindale, Joan Pearce, Carol Walters. SD 71, Comox Valley

<u>Use Social Studies inquiry processes and skills to — ask questions; gather,</u> <u>interpret, and analyze ideas; and communicate findings and decisions</u>

Geographic conditions shaped the emergence of civilizations. Select appropriate forms of presentation suitable for the purpose and audience (e.g., multimedia, oral presentation, song, dramatic performance, written presentation).

Assess the significance of people, places, events, or developments at particular times and places (significance)



Sample activity:

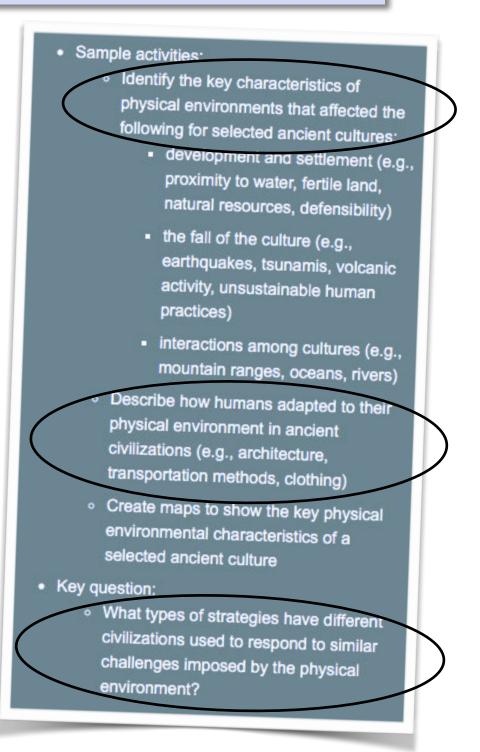
- Identify specific examples of influences and contributions from ancient cultures (e.g., writing system, number system, philosophy, education, religion
- and spirituality, visual arts, drama, architecture, timekeeping) and assess their significance.

Key questions.

What is the most significant archeological finding that helps us understand the development of humans?

 What are the most significant factors that contribute to the decline of an empire? human responses to particular geographic challenges and opportunities, including climates, landforms, and natural resources

How did humans adapt to their physical environments in ancient civilizations?



•

features and characteristics of civilizations and factors that lead to their rise and fall

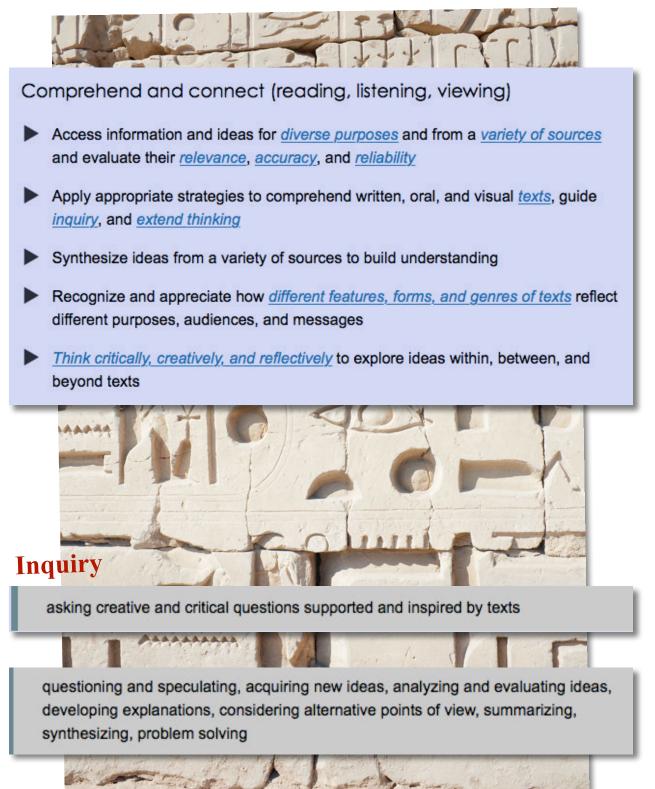
Sample topics:

- components that are common to cultures around the world and throughout time (a.g., social organization, religion, traditions, celebrations, government, law, trade, communications, transportation, technology, fine arts, food, clothing, shelter, medicine, education)
- elements of civilizations such as advanced technology, specialized workers, record keeping, complex institutions, major urban centres

What are significant features and characteristics of ancient civilizations?

What are the factors that contributed to the rise and fall of an empire?

Thinking



Communication

Create and communicate (writing, speaking, representing)

Exchange ideas and viewpoints to build shared understanding and extend thinking

Use writing and design processes to plan, develop, and create engaging and meaningful *literary and informational texts* for a variety of purposes and <u>audiences</u>



talking and thinking about learning (e.g., through reflecting, questioning, goal setting, self-evaluating) to develop one's awareness of self as a reader and as a writer



CRITICAL THINKING CORE COMPETENCY

Critical thinking involves mating judgements based on reasoning: students consider options; analyze these using specific orherta; and draw conclusions and make judgements. Critical thinking competing enormpasses a set of doublines that students use to examine their own thinking, and that of others, doout information that they receive through observation, experience, and vertous forms of communication.

Analyze and critique

I can analyze evidence from different perspectives.

Question and investigate

I can ask open-ended questions and gather information.

I can consider more than one way to proceed in an investigation.

2. Question and investigate

• I can analyze my own assumptions and beliefs and consider views that do not fit with them

I can reflect on and evaluate my thinking, products, and actions.

I can identify criteria that I can use to analyze evidence

I can show if I like something or not.

Sample "1" Statements

1. Analyze and critique

I can analyze evidence from different perspectives.

Sample "1" Statements

- I can explore materials and actions.
- I can ask open-ended questions and gather information.
- I can consider more than one way to proceed in an investigation.
 I can evaluate the credibility of sources of information.
- I can tell the difference between facts and interpretations, opinions, or judgements.

3. Developing ideas

Sample "1" Statements

- I can experiment with different ways of doing things.
- I can develop ariteria for evaluating design options.
- can monitor my progress and adjust my actions to make sure I achieve what I want.
 can make choices that will help me create my intended impact on an audience or situation.

The profiles emphasize the concept of growing and expanding. They are progressive and additive.



COMMUNICATION CORE COMPETENCY

The Communication competency encompasses the set of abilities that students use to import and exchange information, experiences, and ideas, to explore the world around them, and to understand and effectively engage in the use of learning, their personal and social identity and relationships, and the world in which they interact. digital madia. Communication compatency provides a bridge between students'

1. Connect and engage with others (to share and develop ideas)

- I am an active listener; I support and encourage the person speaking.
 I recognize that there are different points of view and I can disagree respectfully.



3. Collaborate to plan, carry out, and review constructions

4. Explain/recount and reflect on experiences and accomplishments

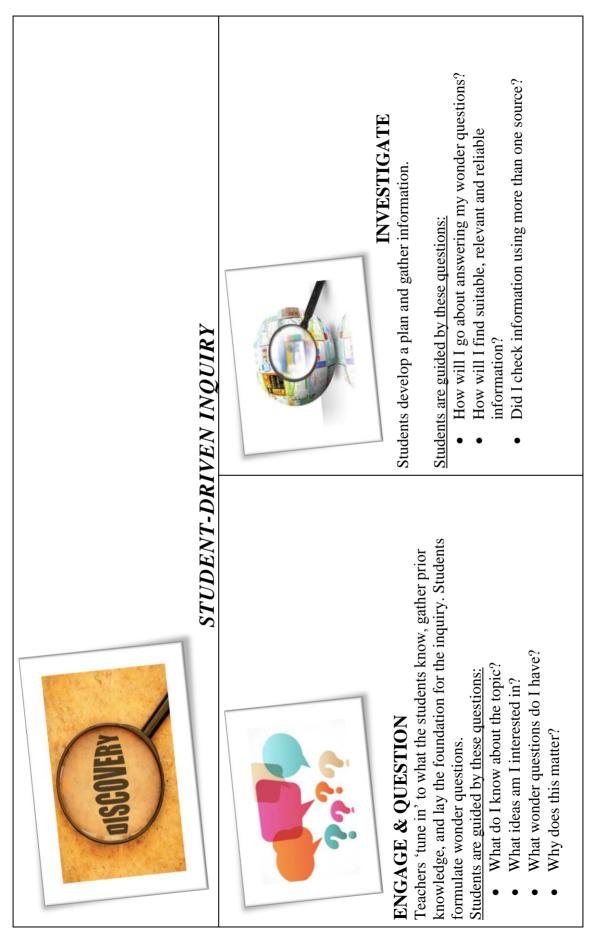
The profiles emphasize the concept of growing and expanding. They are progressive and additive.

Connect and engage with others (to share and develop ideas)

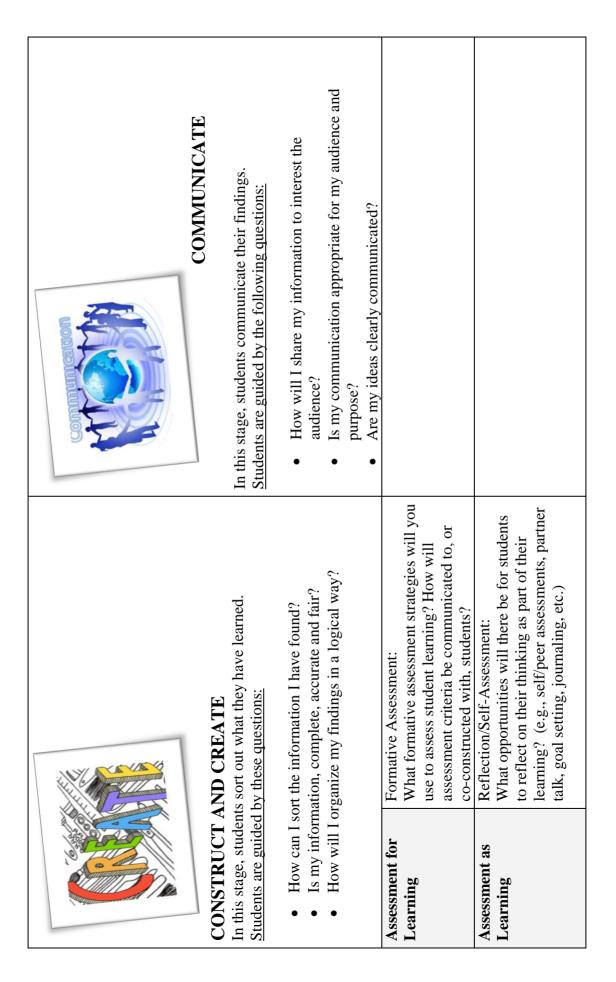
I recognize that there are different points of view and I can disagree respectfully.

Collaborate to plan, carry out, and review constructions and activities

I ask and respond to questions. I am an active listener.



Adapted with permission from Linda O'Reilly, loreilly2@gmail.com



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Assessment of	Summative Assessement:
Learning	How will students demonstrate their understanding (performance task, project, portfolio, test, etc.)?
	Balanced Assessment: gather evidence of learning through observations, conversations, and process, not just products.
	DIFFERENTIATED INSTRUCTION
	How will learning be made accessible for ALL students to succeed?
	TRANSFER/EXTENSION
	How will student learning be extended into the real world?

Adapted with permission from Linda O'Reilly, loreilly2@gmail.com

Suggested inquiry pathways to follow:

1. What significant archeological findings help us understand the development of ancient civilizations?

Students explore and identify specific examples of influences and contributions from ancient cultures.

2. What strategies have different civilizations used to respond to challenges imposed by the physical environment?

Students explore key characteristics of physical environments in ancient civilizations and describe how humans adapted to them (e.g., architecture, transportation methods, clothing, shelter).

3. What are significant features and characteristics of ancient civilizations? What are the factors that lead to their rise and fall?

Students explore and describe evidence of social organization, religion, traditions, celebrations, government, law, trade, communications, transportation, technology, fine arts, food, clothing, shelter, medicine, and education in select ancient civilizations.



Thinking like an Archeologist



Curricular competency: Use Social Studies inquiry processes and skills to - ask questions; gather, interpret, and analyze ideas; and communicate findings.

Learning Targets - Connecting and engaging with others to share and develop ideas. Analyzing and critiquing evidence.

Working in teams, invite students to carefully examine photographs using the following framework:

Notice - Looking closely at the evidence and communicating exactly what you see in the photograph.

Think - Inferring and connecting. Sharing connections, background knowledge, and ideas based on the evidence in the photograph (evidence + my thinking = inference).

Wonder - Asking deepthinking questions. After closely examining the evidence in the photograph, what are you wondering? What questions do you have?

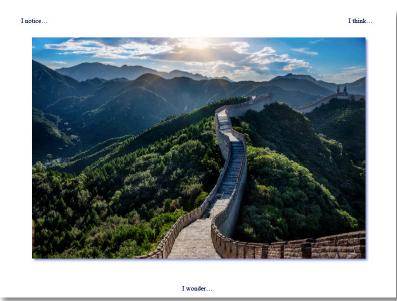


Students can jot down what they notice, think and wonder on post-it notes. Each photograph could lead to further exploration, following up on ideas and questions generated by students.

The following descriptions match the numbered photographs in the *Notice, Think, Wonder photo mats* set. This information can be shared with students after they have had the opportunity to explore the photographs and draw their own conclusions/wonders based on the evidence.

Photograph:

- 1. Angkor-Wat Temple, Cambodia
- 2. Temple of Diana the antique temple of the Roman Empire. Merida, Spain
- 3. Les Ferreres Aqueduct in Tarragona, Spain
- 4. Buddhist smiling faces on towers at Bayon Temple, Cambodia
- 5. A general view of the Medieval Castle in Belmonte, Cuenca, Spain
- 6. Granite Egypt Sphinx on the Neva River embankment, St. Petersburg, Russia
- 7. Inside the Roman Colosseum, Rome, Italy
- 8. Mayan Ruins near Cancun, Mexico
- 9. Mehrangarh Fort, Jodhpur, India
- 10. Remains of Besalú, Spain
- 11. Ruins of Roman Amphitheatre at Tarragona, Spain
- 12. Ruins of a castle, location not provided
- 13. Ruins of the Ancient Acropolis, Rhodes, Greece
- 14. Statues in Karnak Temple, Luxor, Egypt
- 15. The Great Wall of China



Provocations to spark a mini-inquiry: Ancient Civilizations in Canada



Archeological find affirms Heiltsuk Nation's oral history

Settlement on B.C.'s Central Coast dated back to 14 000 years

http://www.cbc.ca/news/canada/britishcolumbia/archeological-find-affirmsheiltsuk-nation-s-oral-history-1.4046088

B.C. village older than the pyramids unearthed by a student (2:07)

Triquet Island, 500 km northwest of Victoria, is painting a picture of how our civilization began – and it was discovered by a student.

https://www.youtube.com/watch? time_continue=1&v=RAg1VXfKIKk





Ancient Underwater Haida Settlement Found (2:50)

A University of Victoria research team found an ancient native fishing settlement of the coast of Haida Gwaii in British Columbia. This report is from the Global BC news broadcast of 22 September 2014.

https://www.youtube.com/watch?v=AOAVX-OHuwI

Earliest sign of human habitation in Canada may have been found

Possible 13 800 year-old fishing trap found in ocean near B.C.'s Haida Gwaii islands

http://www.cbc.ca/news/technology/earliest-sign-of-human-habitation-in-canada-mayhave-been-found-1.2775151

Oldest human footprints in North America discovered in Canada: study

https://www.ctvnews.ca/sci-tech/oldesthuman-footprints-in-north-americadiscovered-in-canada-study-1.3863896 Researchers believe they have found the oldest known human footprints in North America



Clovis point discovery improves understanding of B.C. First Nations' history

Archaeologist says discovery adds to knowledge of North American migrations milennia ago

http://www.cbc.ca/news/canada/britishcolumbia/clovis-point-fort-st-john-1.3511495

Study on B.C. First Nations stone tools finds glacier brought mountain to man

http://www.cbc.ca/news/aboriginal/studyon-b-c-first-nations-stone-tools-findsglacier-brought-mountain-toman-1.3236899



Bead Time Line Story – 10 000 years of History Using Oral Tradition Storytelling

By Suzanne Camp, Courtenay BC

Introduction: Use this story to help people visualize and understand how oral tradition storytelling has kept stories, culture, traditions and history of aboriginal people alive for thousands of years. The Bead Timeline story can be adapted with information about any community's history and territories.

The Story

{Recognition of Territory before the story starts}

Action: Hold a small basket which contains the Bead Timeline in the palm of your hand and introduce the story to your audience.

The Bead Timeline

Action: (Show a single bead fastened to a small card)

"Each bead on this timeline represents a generation of people. A generation is from the time a baby is born until the time that child grows up and can have a baby of their own. For this timeline a single bead represents 20 years or one generation. There are 500 beads or 500 generations of people represented here on this time line."

"If you are 6 years old you are part of this single bead, if you are 10 you are half of this bead. All over the world, no matter where your family has come from, every culture and all people have a place on a time line like this."

Action: Begin <u>slowly</u> drawing the timeline out of your basket as you start to tell the story.

"We are going to journey back, back in time. Each time the beads change color we will have gone back 5 generations or 100 years. We are going to go all the way back through time to 10000 years ago."

"People have lived here along the Pacific Northwest Coast for at least 10000 years. Stone tools and fire pits are some of the few signs we can find of those ancient peoples from so long ago."

"People's stories, history, culture and traditions were passed from generation to generation through speaking and listening and remembering and speaking and listening and remembering. (*Point to your mouth, ears and your forehead when you are repeating "speaking and listening and remembering"*) Children in their villages heard their stories many times. When the children were grown they remembered and passed on those stories, the history and the traditions of their communities."

"And so it was for generation after generation, long before books were written; the stories of the people were told again and again."

Action: (By now, you should be near the end of the time line. Your audience will be wondering if it will ever end and then, finally draw out and hold the last bead)

"Back here *(pointing to the last bead on the timeline)*, 10 000 years ago, it was the end of the last ice age; a time when much of the land on North America was covered with huge ice fields. So much water was locked up in that ice that sea levels around the world were much lower than they are today."

"Eventually melting glaciers and rising sea waters covered the shorelines where people might have lived and travelled along the coast. As the ocean levels rose, the traces of ancient habitation disappeared below the waves."

"Through all that time though, stories continued to be passed from generation to generation: history was remembered and cultural traditions were honored; through speaking and listening and remembering, and speaking and listening and remembering, and speaking and listening and remembering. " (*Point to your mouth, ears and forehead while you are repeating these words; let your voice fade away softly to end the story.*)



The End of the Bead Timeline Story

When the Timeline Story is finished, introduce an oral tradition story or other ideas you want to discuss about traditional aboriginal ecological knowledge, history, culture or contemporary issues.

Some suggestions for using this bead timeline:

Story telling; Resource Management and Conservation; Cultural Knowledge;

Traditional local communities; Contemporary local communities

- 'Set the scene' for oral tradition storytelling –explaining how stories, culture and tradition were passed along from generation to generation through speaking, listening and remembering and speaking, listening and remembering.....down through the generations to the present day
- 2. Talk about how the First People practiced conservation and caring for their resources in a respectful, thoughtful way using only what was needed –'Leaving a light footprint on the land'; in comparison to our present day practices creating a 'heavy footprint on the land' where we are carelessly using and discarding/polluting our limited earth resources. (This is usually where I hold up my 7 beads/ generations string to show how quickly we have changed our Comox Valley with our heavy footprint)
- 3. Talk about the People of the Cedar: About 6 000 years ago the world had warmed up enough for cedar trees to begin to grow. *Show that place on the time line.* Cedar became so important that it is still known as the 'Tree of Life'. For thousands of years Northwest Coast peoples have used cedar for ceremonial regalia, homes, canoes, clothing and household items such as rope and basketry.
- 4. The bead timeline can be adapted to talk about your traditional local communities, your history and your environment to help children understand how long people have lived on the land of your local territory. For instance, here in the Comox Valley, the remains of a vast network of fish weirs can be found along the Courtenay River estuary. Radio carbon dating has established that the age of a least one of the wooden stakes is over 1300 years old, so it shows that aboriginal people have lived and worked in this area for at least that length of time.
- 5. Show the 10 000 year time line and in comparison, show the tiny contemporary time line of your local community: in the case of the Comox Valley it is only 7 beads/generations since settlers arrived to farm, fish, log, establish coal and copper mines and build homes. Talk about how your community looks today paved roads, bridges, concrete buildings and landfills; all of which have resulted in a very heavy contemporary 'footprint' on the land a footprint that will last for centuries into the future.

Materials you will need to create your Bead Timeline:

A small woven basket or box (palm sized) to slowly draw out your timeline as you are

talking Beads - size 6/0 (500 +beads) in assorted colors -to represent 500 generations of

people Strong flexible string/dental floss - about 5-6 feet long

4 Large beads-

A large bead to represent 10 000 years ago - Tie this bead on very securely.... It will be holding your entire bead line as you make it. This bead marks the end of the last ice age we had in North America

A large bead to mark about 4500 years ago when Egyptian pyramids were being built –a time which we think of today as ancient history

A large bead to mark 2 000 years ago; the time when the calendar we use today started

A large bead to end your timeline; this is the bead you will hold as you pull the timeline out of your basket

You can choose other large bead time markers but don't over load the timeline with too many large beads. The simplicity of the timeline makes it most effective and adaptable to many stories.

One bead (the same size as your timeline beads) fastened to a small card- this bead **represents one generation of people** - I explain to the children that one bead represents 20 years (or from the time a baby is born until that baby grows up and can have a child of their own)...... So, 5 beads are 5 generations or 100 years or a century on your timeline

A small pin or string with assorted color beads to represent how many generations your community has existed as a 'modern' settlement. Here in the Comox Valley, I use 7 beads to represent the past 140 years since European settlers came to this valley

How to make your timeline

Securely tie the large '10 000 year bead' onto one end of a string that is about 5-6 feet long.

String 5 beads of one color; choose another color and add 5 more beads; choose another color and continue. Make sure your bead colors have some color contrast so the children can see the centuries passing as the timeline is slowly drawn out of your basket. When you get to 5 500 years from starting your timeline add one of the larger beads to represent when the Egyptian pyramids were being built. When you get to the 8000 year mark (or 2 000 years from our present time); add other large bead on to represent the calendar we use today. Continue adding 5 beads of each color and work your way up to the present time.

To Finish Use another larger bead to securely tie off your timeline – this is the one you will hold as you start drawing your bead line out of a small basket or box.

Bead timeline story telling created and shared by Suzanne Camp, Courtenay BC

Provocations to spark a mini inquiry: The Statues of Easter Island

Easter Island: Why are there Giant Statues on a Mysterious Pacific Island? In the Southern Pacific Ocean, a remote volcanic island looms out of the sea with giant stone statues.

So who put these giant stone heads on Easter Island and what was their purpose?

https://theplanetd.com/easter-island/



Making Easter Island Statues Walk -Mysteries of a Lost World (1:34)

https://www.youtube.com/watch? v=PHTkcbavhv0



The Statues of Easter Island

A riddle of engineering hasn't stopped archaeologists from debating how the giant carved stones were transported around the island.

https://www.smithsonianmag.com/travel/thestatues-of-easter-island-11248888/





Unsolved Mysteries of Easter Island (50:28)

A team of modern archaeologists, engineers, and scientists attempt to solve and explain the origin of the Moai statues by excavating, restoring and discovering new theories and conspiracies in their effort to unearth the truth of this ancient civilization.

https://www.youtube.com/watch?v=mH0sIjAHBVY

Ancient Civilizations - An Inventions and Innovations Inquiry

Curricular competencies:

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings.
- Assess the significance of people, places, events or developments at particular times and places

Students explore and identify specific examples of influences and contributions from ancient cultures.

The driving question: What are significant archeological findings that help us understand the development of ancient cultures?



The inquiry: Use a variety of sources to research an inventions or area of innovation from an ancient culture that has had a lasting impact. Identify specific examples of influences and contributions (e.g. writing system, number system, philosophy, education, religion and spirituality, visual arts, drama, architecture, timekeeping) and assess their significance.

Select and create an appropriate form of presentation suitable for the purpose and audience (e.g., an animation, an iMovie, an oral presentation, a slideshow, a dramatic performance, a 3D model).

Explore and gather evidence from the following areas for a selected ancient civilization:

- history of the invention/innovation (the ancient culture; when, where)
- how it was made/how it began
- interesting or impressive facts
- ancient purposes or uses
- how this invention/innovation has had a lasting impact

Establish your own guiding questions for the areas of inquiry and respond to them. Create an effective, eye-catching form of presentation to communicate your findings.

Suggested criteria for success:

- At least five key areas of inquiry explored, with guiding questions and supporting information for each are
- A bibliography, documenting the sources that guided your inquiry (websites, books publisher/date, page number),
- A 3D model, related images or something interactive to engage others in your research

Curricular competencies:

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings.
- Assess the significance of people, places, events or developments at particular times and places

Students explore key characteristics of physical environments in ancient civilizations and describe how humans adapted to them (e.g., architecture, transportation methods, clothing, shelter).

The driving questions: What strategies have different civilizations used to respond to challenges imposed by the physical environment? What was life like in Ancient _____?



The inquiry: Explore a variety of sources to identify specific aspects of daily life in a selected ancient civilization. Describe how humans adapted to their physical environment (development and settlement, meeting basic needs; architecture, water, food, clothing, transportation methods, timekeeping, education) and interactions among cultures.

Select and create an appropriate form of presentation suitable for the purpose and audience (e.g., an animation, an iMovie, an oral presentation, a slideshow, a dramatic performance, a 3D model). Provide a short oral presentation to share your findings.

Explore and gather evidence from the following areas for a selected ancient civilization:

- development and settlement (e.g., proximity to water, fertile land, natural resources; defensibility)
- meeting basic needs (food, clothing, shelter)
- what family life was like
- the jobs/responsibilities people had
- what people did for fun
- unique or interesting facts

Establish your own guiding questions for the areas of inquiry and respond to them. Create an effective, eye-catching form of presentation to communicate your findings.

Suggested criteria for success:

- Include at least five key areas of inquiry with guiding questions and supporting information
- Include a bibliography, documenting the sources that guided your inquiry (websites, books publisher/date, page number)
- Create a 3D model, related images or something interactive to engage others in your research

Ancient Civilizations Board Game Design Challenge

Curricular competencies:

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings.
- Assess the significance of people, places, events or developments at particular times and places.

Students explore and describe significant features of ancient civilizations and factors that lead to their rise and fall.

The driving questions: What are significant features and characteristics of an ancient civilization? What are the factors that lead to its rise and fall?

The design challenge: Develop a fun and interactive board game based on your research of an ancient civilization of your choosing.

- Explore and describe specific features and characteristics from as selected ancient culture.
- Design and assemble a board game to 'showcase' and share your research.
- Share present your board game design to other students in the class.



Possible features or characteristics to explore:

social organization, religion, traditions, achievements, celebrations, government, law, trade, communications, transportation, technology, fine arts, food and agriculture, clothing, architecture, medicine, education, music, sports, responsibilities and professions, recreation.

Suggested criteria for success:

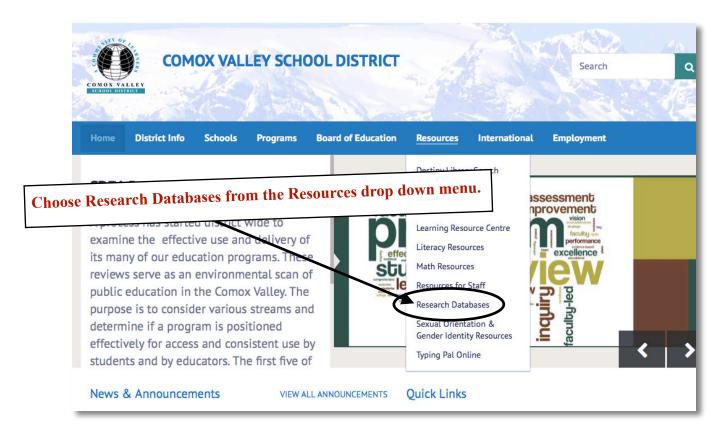
• working in teams, the partnership is collaborative- partners work well together to conduct research and design an engaging ancient civilizations board game in a box.

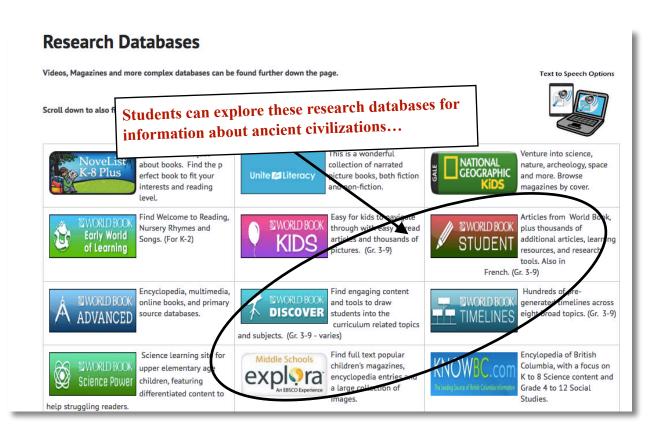


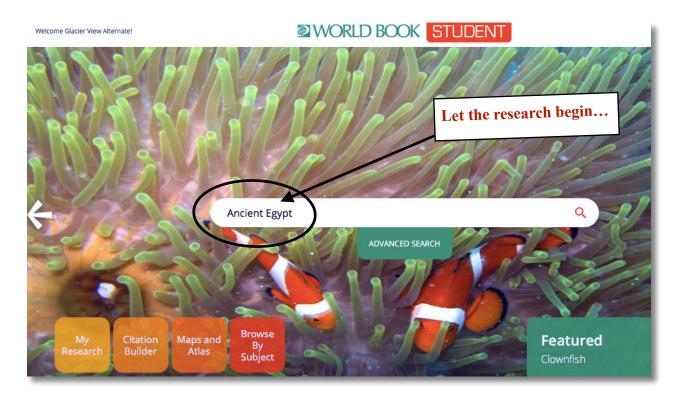
include a bibliography, documenting the sources that guided your game design (websites, books publisher/date, page number)
the finished board game includes a minimum of 20 game cards that reflect the findings from your inquiry. RESEARCH
the finished board game has an eye-catching title on the lid of the box and a compelling and user-friendly game board design on the inside of the box. DESIGN

•the finished game board includes explicit, easy-to-follow instructions.

•the finished board game includes all necessary game pieces (dice if necessary) so that classmates can play the game. **PLAYABILITY**

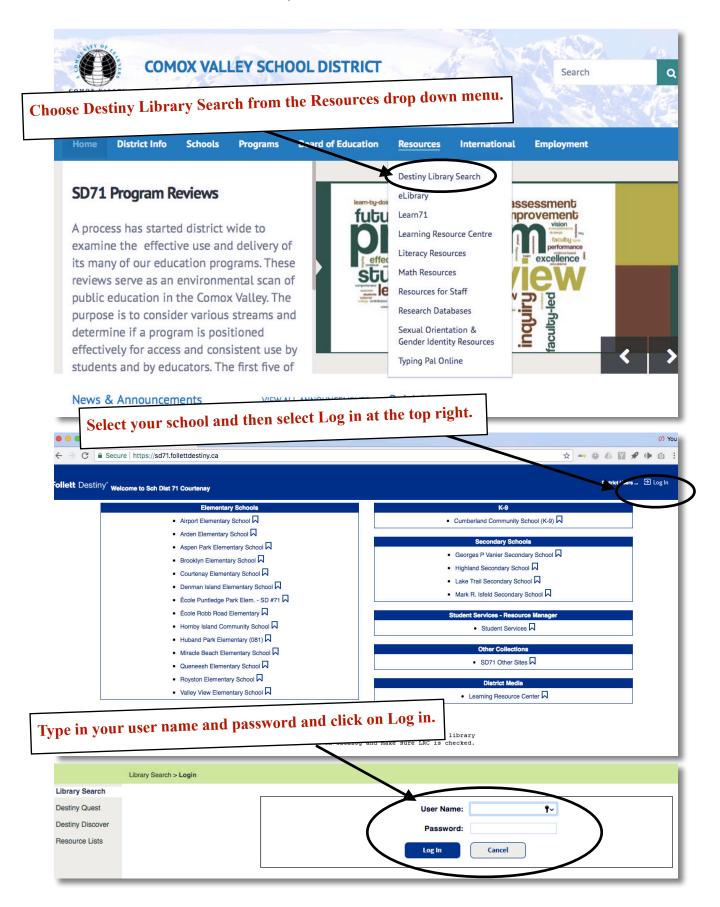




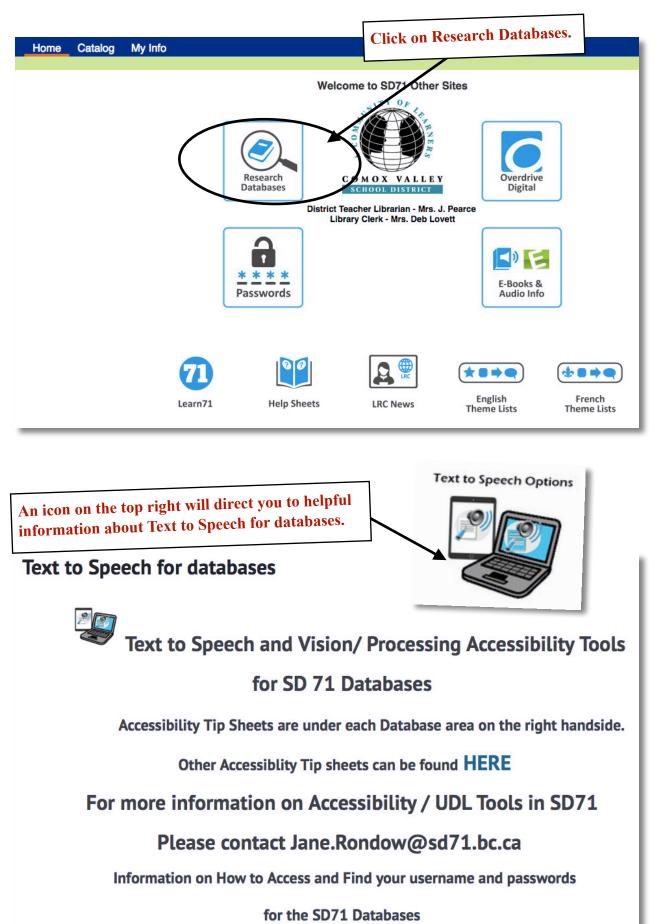




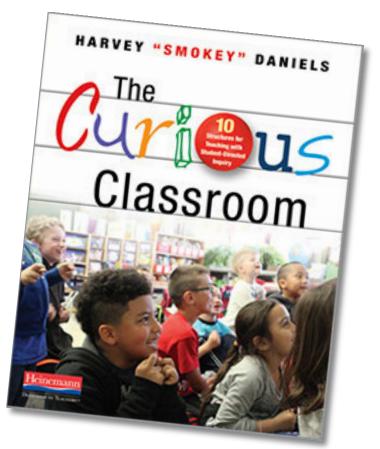
*If you are trying to access the research databases from home you'll have to log in with your password.



Another way to access the Research Databases



Books to Explore

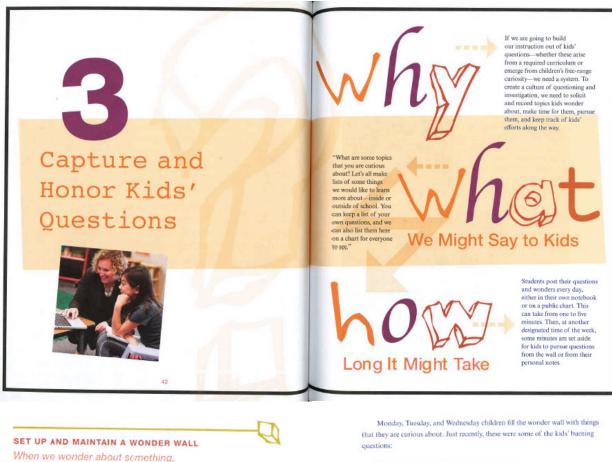


Just getting started with inquiry? Looking for your own next step in student-driven inquiry? Or do you just want new teaching ideas to try? **Read The Curious Classroom**. "By the end of this book," writes Smokey Daniels, "I hope you will say two things: I never knew my kids were capable of working at this level; and this is the most fun I have ever had in my teaching life."

You can find this book on Destiny and borrow it from the LRC Professional Library...

Ever wonder how to get students genuinely engaged in your curriculum? Or wish you could let them explore the amazing questions they ask? If so, Smokey provides research-based suggestions that help explore the curriculum by connecting what kids wonder about, to the wonders you must teach them.

https://www.youtube.com/watch?v=xXfRj1mZmNI



when we wonder about something we need to know more

Kari Ridolfi, kindergarten teacher at Burley School

Kindergarten teacher Kari Ridolfi uses a wonder wall in her classroom to provide her students a way to ask questions, seek answers, and validate their curiosity (see Figure 3.4). The wonder wall is located in the students' writing center, where they have access to writing tools and a variety of sticky notes. Throughout the week, students add their wonders to the wall. Wonders may come from questions that pop up during independent reading or from lingering questions at the conclusion of a lesson. Thursdays and Fridays, the students visit the wonder wall as a whole group to seek answers to their questions.

While the teacher does do some preparation for the wonder research, the students take full ownership during the wonder workshop to read articles and images, interact with artifacts, and record their new learning to share with classmates.

days of finding answers to selected questions.

Notice how Kari devotes a piece of each day of the week to support-

ing the wonder wall: three days of generating questions and two



Figure 3.4 Wonder wall in Karl Ridolfi's kindergarten at Burley School

- · If I swallow a seed, will it grow in my stomach?
- How did the first person on Earth get here?
- What is the most famous book ever written?
- How far can a spider monkey jump?
- How many links would it take to measure our classroom?
- How are dinosaur fossils created?
- Were dragons real or make-believe?
- Do tornadoes come to Chicago?
- Are super powers real?
- · How does a praying mantis eat?

As students add wonders, Kari groups similar topics together. For example, if there are several questions about dinosaurs, she'll move them to a shared space on the wonder wall. This helps to keep the wonder wall organized and track similar student curiosities.

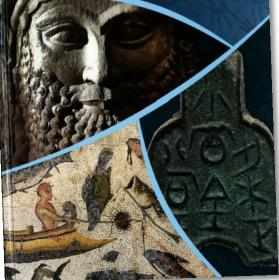
On Thursdays, students visit the wonder wall as a group. They read aloud wonders that are on the wall, recognize similarities, and decide which wonders they are most curious about as a class. After narrowing the choices down to five or six, Kari will write each chosen wonder at the top of a fresh piece of chart paper. Students then have an opportunity to sign up on the chart for which wonder they'd like to investigate, thus forming groups.

While this structure helps Kari place kids into small teams, it also sets up *individual inquiries* very well. Kids can work solo if they wish on any question from the week-long wonder wall extravaganza.

Capture and Honor Kids' Questions 47

48 The Curious Glassroom

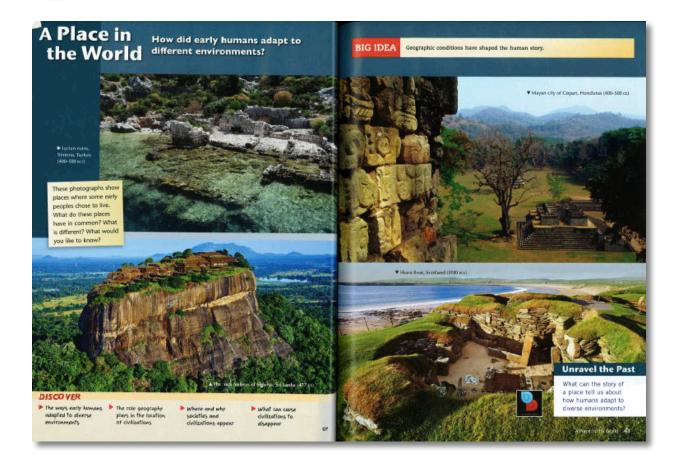
THE ANCIENT WORLD TO THE 7th CENTURY



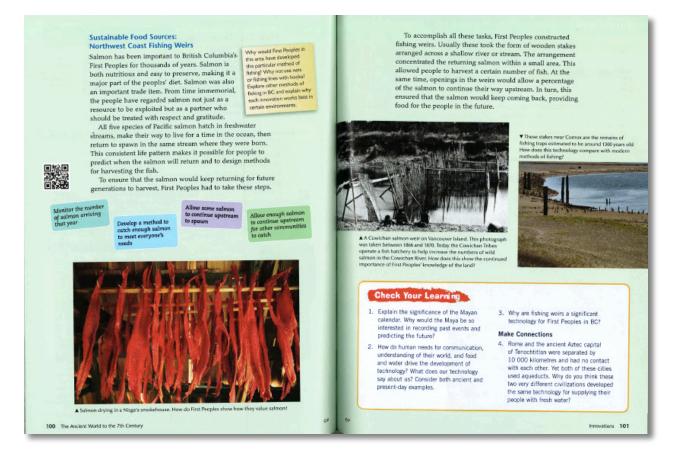
Books to Explore

Inquiring Minds - The Ancient World to the 7th Century Pearson Canada

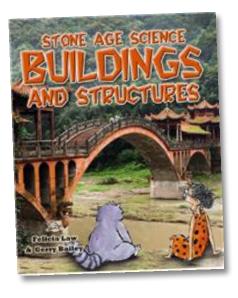
Students discover the connections between life today and life in the ancient past and explore how individuals, cultures, and the human family all have stories that begin in the past and carry lessons for the present.







Books to Explore

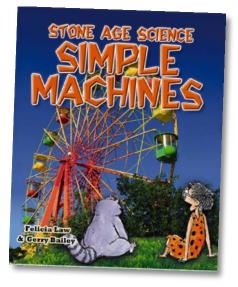


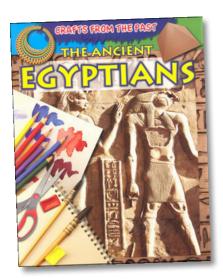
Stone Age Science: Simple Machines by Felicia Law and Gerry Bailey

Leo teaches his cat Pallas all about simple machines by applying his knowledge of science to their stone age world. Engaging illustrations and stories provide a fun introduction to science concepts, including wheel and axles, levers, pulleys, wedges, screws, and more.

Stone Age Science: Buildings and Structures by Felicia Law and Gerry Bailey

Leo teaches his cat Pallas all about buildings and structures by applying his knowledge of science to their stone age world. Engaging illustrations and stories provide a fun introduction to science concepts, including ramps, forces and loads, tension, and more.





The Ancient Egyptians (Crafts from the Past) by Jessica Cohn

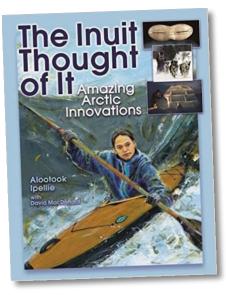
The wonders left behind by the ancient Egyptians are some of the most astounding artifacts in the world.

Readers are transported back to the distant past as they learn about many fascinating features of ancient Egyptian culture. Each chapter includes a simple craft relating to the discussion.

The Ancient Greeks (Crafts from the Past) by Jessica Cohn

This book describes various aspects of life in Ancient Greece and provides instructions for creating related crafts.



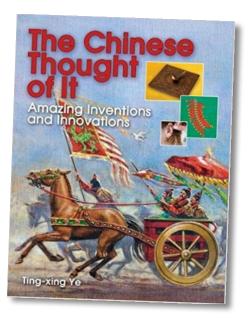


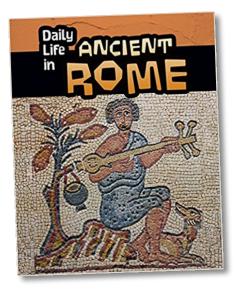
The Inuit Thought of It: Amazing Arctic Innovations

Join authors Alootook Ipellie and David MacDonald as they explore the amazing innovations of traditional Inuit and how their ideas continue to echo around the world. Some inventions are still familiar to us: the one-person watercraft known as a kayak still retains its Inuit name.

The Chinese Thought of It: Amazing Inventions and Innovations

Acupuncture, gun powder and the secrets to spinning silk are innovations that we have come to associate with China. But did you know that the Chinese also invented the umbrella? And toilet paper, initially made from rice straw clumped together, was first used in China!



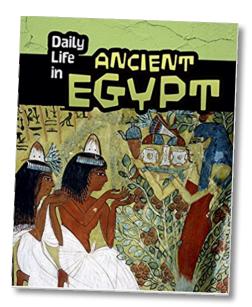


Daily Life in Ancient Rome (Daily Life in Ancient Civilizations) by Don Nardo

What was Ancient Roman family life like? How did the Romans cook and eat their food? This book explores what life was really like for everyday people in Ancient Rome. Using primary sources and information from archeological discoveries, it uncovers some fascinating insights and explodes some myths.

Daily Life in Ancient Egypt (Daily Life in Ancient Civilizations) by Don Nardo

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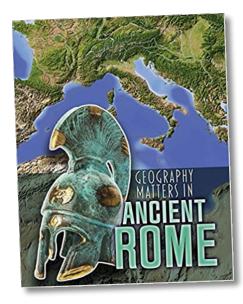


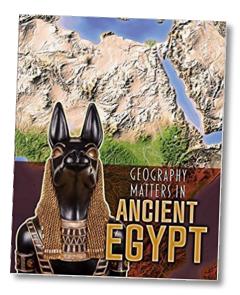
Daily Life in Ancient Greece (Daily Life in Ancient Civilizations) by Don Nardo

What was an Ancient Greek home like? What did the Ancient Greeks do for fun? This book explores what life was really like for everyday people in Ancient Greece. Using primary sources and information from archeological discoveries, it uncovers some fascinating insights and explodes some myths. Where were Ancient Egyptian towns and cities? How did the Nile River shape Ancient Egyptian life?

Geography Matters in Ancient

Egypt looks at how the Egyptian Empire changed through time and gives fascinating insights into many different aspects of Egyptian life through its geography.





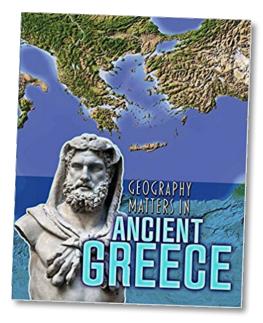
How did the Roman Empire start? What were travel, transportation and trade like in the Roman Empire?

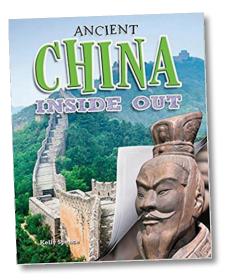
Geography Matters in Ancient Rome looks at how the looks at how the Roman Empire changed through time and gives fascinating insights into many different aspects of Roman life through its geography.

What natural resources did Ancient Greece have? What was Ancient Greek society like? How did the Ancient Greeks travel?

Geography Matters in Ancient Greece

looks at how the looks at how the Greek Empire changed through time and gives fascinating insights into many different aspects of Greek life through its geography.

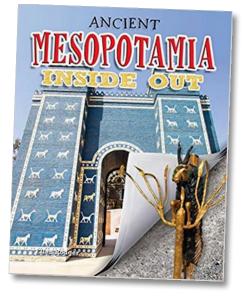


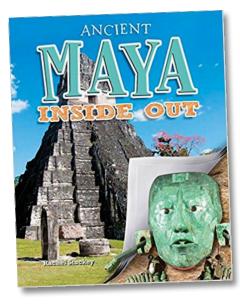


Ancient China Inside Out explores the culture and achievements of ancient China through the examination of artifacts that have survived through the centuries. Each primary-source artifact offers the reader significant clues to the civilization's technologies, cultural traditions, foods, and conflicts.

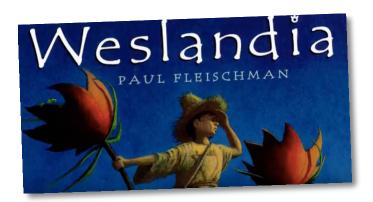
Ancient Mesopotamia Inside Out

explores the culture and achievements of ancient Mesopotamia through the examination of artifacts that have survived through the centuries. Each primary-source artifact offers the reader significant clues to the civilization's technologies, cultural traditions, foods, and conflicts.





Ancient Maya Inside Out explores the culture and achievements of the Maya through the examination of artifacts that have survived through the centuries and offers the reader significant clues to the civilization's technologies, cultural traditions, foods, and conflicts. Video clips to Explore



Weslandia written by Paul Fleishman, illustrated by Kevin Hawks (15:32)

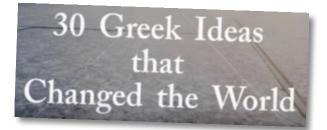
Made as a submission to a project for her bachelors in Music Technology, this is an audio drama with the childrens' book Weslandia.

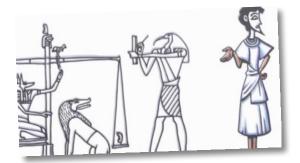
https://www.youtube.com/watch? v=RetwwWOpt84

30 Greek Ideas that Changed the World (3:53)

https://www.youtube.com/watch? v=QJZ95Mcx0so

Greeks have greatly influenced and contributed to culture, arts, exploration, literature, philosophy, politics, architecture, music, mathematics, science and technology, business, cuisine, and sports, both historically and contemporarily.





Ancient Egyptian Civilizations and Arts (6:17)

https://www.youtube.com/watch?v=28iLZxItOIA

Egypt left a lasting legacy. Its art and architecture were widely copied, and its antiquities carried off to far corners of the world. Its monumental ruins have inspired the imaginations of travellers and writers for centuries. Video clips to Explore

10 Mysterious Archaeological Discoveries No One Can Explain (4:28)

https://www.youtube.com/watch? v=AGG3nMwY-Ss





6 Advanced Ancient Inventions We Still Can't Figure Out (6:53)

https://www.youtube.com/watch? v=RlgbKU9mgJA

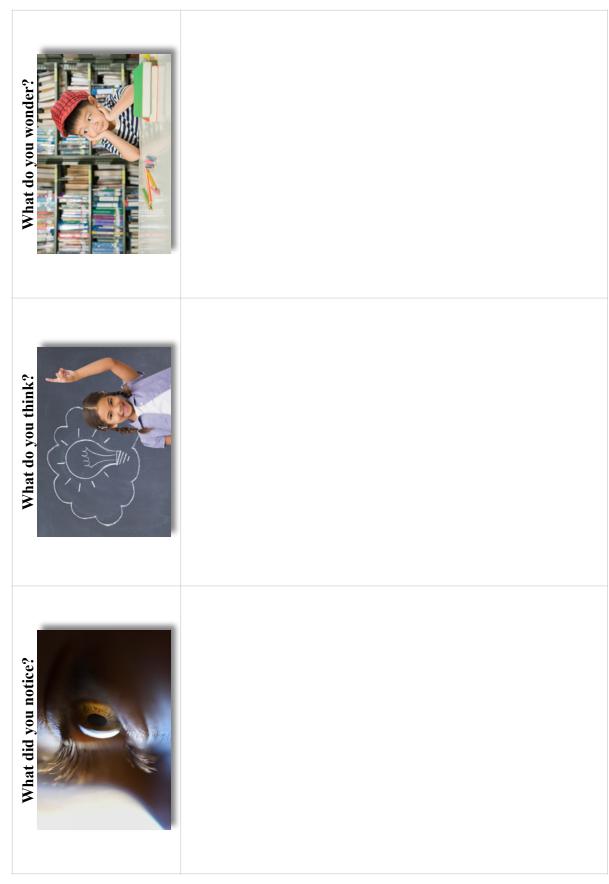
We've lost the secret to making some of history's most useful inventions, and for all of our ingenuity and discoveries, our ancestors of thousands of years ago are still able to baffle us with their ingenuity and discoveries.

Ancient Egyptian Inventions And Technology (6:46)

A good example from a student presenting her learning about Ancient Egypt.

https://www.youtube.com/watch? v=UdgqEgZHO8I IT HAS BEEN SAID THAT ANCIENT EGYPT WAS AHEAD OF THEIR TIME.... WHAT ARE SOME OF THE INVENTIONS AND TECHNOLOGY THAT MADE PEOPLE THINK THAT?





What is Inquiry-based learning?

Inquiry-based learning is a dynamic and emergent process that builds on students' natural curiosity about the world in which they live. Inquiry places ideas at the centre of the learning experience. Teachers using an inquiry-based approach encourage students to ask and genuinely investigate their own questions about the world. Teachers further facilitate students' learning by providing a variety of tools, resources, and experiences that enable learners to investigate, analyze, reflect, and rigorously discuss potential solutions to their own questions about a topic the class is studying. (An excerpt from www.naturalcuriosity.ca)

Types of Inquiry-based learning

Structured inquiry

- the teacher determines the big idea, and what the students will come to understand by the end of the inquiry
- the teacher provides the guiding questions
- the students will help create the plan and guide the inquiry with their questions, interests, ideas, analysis, reflections and understandings



Guided inquiry

- the teacher determines the big idea or topic and the students and/or the teacher come up with the questions
- the students are responsible for designing and following their own procedures to test the question and then communicate their results and findings

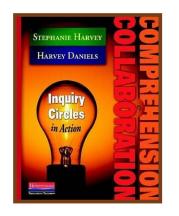
Open inquiry

- the students determine the purpose and formulate the questions
- the students design the procedures, gather the materials and communicate their findings
- the teacher facilitates, supports, asks questions and redirects the investigation

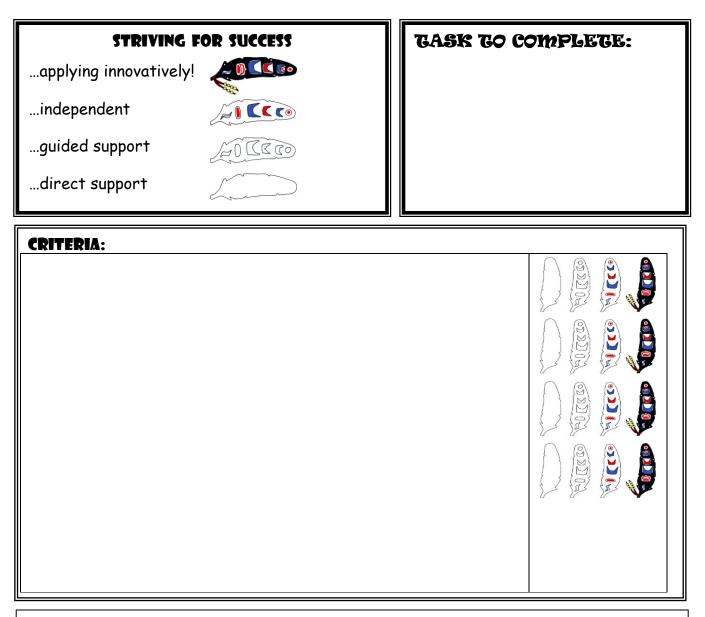
Adapted from Michelle Hikida, mhikida@sd38.bc.ca ~ Super Conference, October, 2017

'What learners can do during inquiry time'

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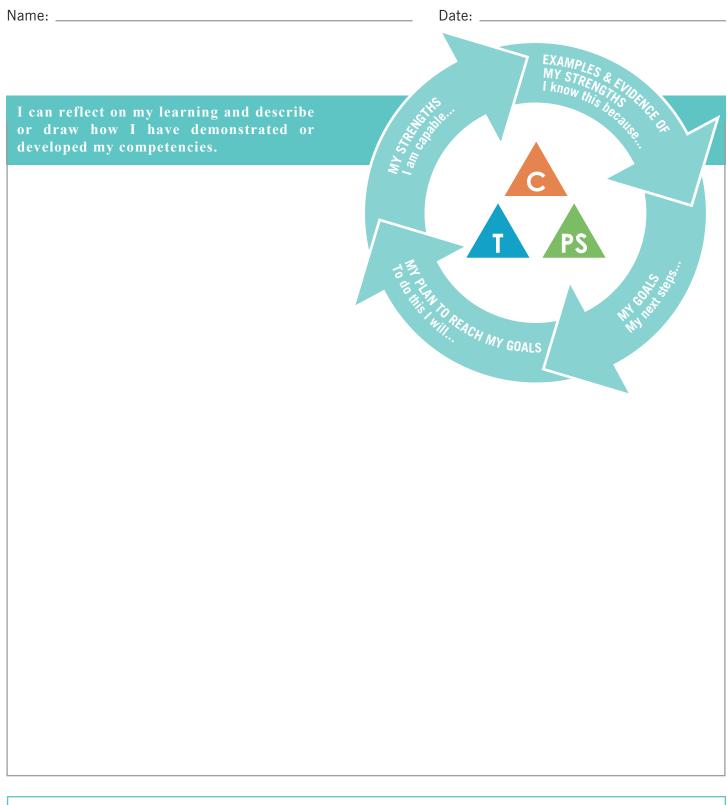
- Read to themselves ~ nothing correlates more highly with reading achievement than reading volume. Reading provides the most direct route to finding information and answering questions. So just plain, independent reading is one of the most important thangs kids can do during inquiry circle time.
- Read to each other ~ reading together with an inquiry circle partner or the entire inquiry circle can spur conversation and lead kids to discoveries they might not make when reading alone.
- Conduct research online ~ choosing sources which are accurate and authoritative. Is the source up to date? Consider EBSCO and other Destiny based links.
- Respond in writing and/or drawing ~ jotting and drawing thinking is especially useful when reading to find information and answer questions. Keeping track of thoughts and questions helps students clarify their understanding and synthesize information. Students are encouraged to write and/or draw about their research, whether in books, online, watching a video, or scrutinizing an artifact.
- Respond by talking ~ talking with groups or partners goes a long way toward learning and understanding. Explicitly set and co-construct criteria for 'quiet conversation'.
- Develop interview questions and conduct practice interviews ~ students come up with some interview questions and practice interviewing with an inquiry partner.
- Contact specialists and experts ~ Students work with partners to come up with a list of people they might want to contact to get more information.
- Maintain a research notebook ~ We remind students to sort through their written and drawn responses and write up important findings in their notebooks so they don't lose track of them Often these discoveries lead to more questions.
- Plan to actively use knowledge and take action ~ Students can discuss how they plan to actively use the knowledge which they have acquired. They might decide to simply share it with the class or they may be moved to take a more public advocacy position. They can talk with each other and then make a collaborative plan.



SELF ASSESSMENT:

TEACHER ASSESSMENT COMMENTS:

CORE COMPETENCIES SELF-ASSESSMENT





Self-assessment can take many forms and may focus on one, a few, or all of the core competencies.