

## Planning the inquiry

### 1. What is our purpose?

#### To inquire into the following:

##### Transdisciplinary Theme- Where We Are in Place & Time

- **Central Idea-Progress can transform environments and geography.**

#### Summative assessment task(s):

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

#### Formative assessments(s):

- Math - 3rd Week: Two and Three-Dimensional Figures and Fractions
- Reading- 4th Week: Poetry

#### Summative:

- Math - 5th Week: Two and Three-Dimensional Figures and Fractions
- Reading - 6th Week:

Class/grade: 2nd Grade

Age group: **6-7**

School: **Briscoe Elementary**

School code: **112**



Title: Where We Are In Place and Time

Teacher(s): Mr. Quintanilla, Mrs. Falcon, Mrs. Esparza

Date: December 9, 2017- February 16, 2017

### 2. What do we want to learn?

What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?

L1 Form - How do natural and manmade resources form our environment?

L2 Change- How have humans changed the physical environment for our own use?

L3 Responsibility- What is our responsibility in society to use natural and manmade resources?

#### What lines of inquiry will define the scope of the inquiry into the central idea?

- Science- Distinguish between natural and manmade resources. (2.7C)
- Social Studies- (2.6A) Identify major landforms and bodies of water.
- Math- Classify and sort three-dimensional solids (2.8B)

#### What teacher questions/provocations will drive these inquiries?

- L1 Form- In what ways are natural and manmade resources different? Explain some ways we can conserve natural and manmade resources? (DOK 1/2)
- L2 Change-How have humans changed the physical environment? Why do you think we have changed the environment? What are the effects of changing the environment?
- L3 Responsibility-How can we conserve natural resources? Explain

### 3. How might we know what we have learned?

*This column should be used in conjunction with “How best might we learn?”*

What are the possible ways of assessing students’ prior knowledge and skills? What evidence will we look for?

- L1: Form - Students will create a foldable where they draw and identify two- and three- dimensional shapes using real life objects.
- L2: Change-Students will create a classroom map
- L3: Responsibility- KWL chart on natural resources and how to be responsible with them.

What are the possible ways of assessing student learning in the context of the lines of inquiry? What evidence will we look for?

L1: Form- Students will create and design their own three-dimensional building structure using construction paper. They will identify the building structures’ shape attributes. (DOK 4)

L2 Change-Students will create a map of the school using a legend. They will change the layout of the school and rearrange the school to their liking. After students can compare and contrast their map to the map of the school.

L3 Responsibility-

### 4. How best might we learn?

**What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?**

- L1 Form - Students will go on a scavenger hunt in the classroom and classify shapes found (DOK 1/2)
- Students will create their own 2D and 3D shapes using the peg/geoboards and foldables. (DOK 3/4)
- L2- Change - Students will work in groups and explore different maps( amusement parks, universities). Students will then create a map of our school neighborhood. Students must label their map and include a legend.
- L3 Responsibility- Students will bring an item or picture to attach to the manmade/natural resources anchor chart. Students will explain how to be responsible with natural resources.

What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?

**Transdisciplinary skills**

- Thinking: Application, metacognition (L)
- Social: interaction in a variety of group roles (L3 Responsibility)
- Self-Management: Informed Choices, safety (L)
- Researching: recording and organizing data (L2 change)
- Communication: Nonverbal and verbal communication (L)

**Learner Profile:**

- Caring-L3 responsibility
- Inquirer-
- communicate-L

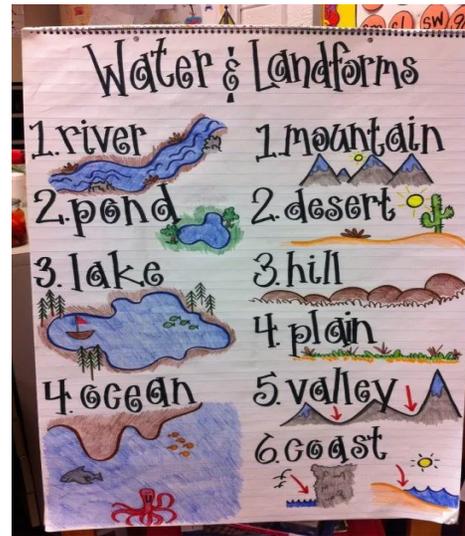
**PYP Attitudes:**

- Appreciation-L1 form
- Respect-L
- Commitment-L
- creativity-L

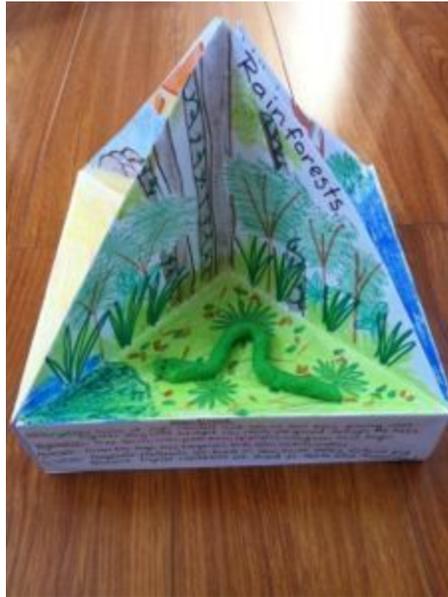
## 5. What resources need to be gathered?

What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?

BrainPop Jr: Video on Natural Resources <https://jr.brainpop.com/science/conservation/naturalresources/>



Brainpop Jr: Natural Resources Video



Science/Social Studies:4D Diarama

Science Based-Experiment: We need to use our natural resources responsibly and conserve them. This project will shows what happens when oil is spilled and what we can do to clean it.



Anchor Charts: Natural vs. Manmade Resources- Students will bring either a natural or manmade resource from home.



**How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?**

Guest Speaker: Martin Falcon

Date: January 26th, 2018 at 1:30pm

Topic: Renewable and Non-Renewable Resources

Mr. Falcon works for EPIC Pipeline, a natural gas pipeline company. He is a Project Controls Specialist. They are building the second largest natural gas pipeline in Texas, which starts near Carlsbad, New Mexico all the way to Corpus Christi. Mr. Falcon will share his day-to-day job experience in the oil and gas industry. He will talk about the importance of renewable and non-renewable resources, in this case natural gas and the importance of pipelines, which are the energy lifelines that help communities in almost every activity in everyday life.

Facts about the natural resource: Natural gas:

- Natural gas is the most environmentally friendly [hydrocarbon](#) fossil fuel.
- Steel and paper production uses natural gas.
- Things that use natural gas/are made out of natural gas: Water heater, space heater, stove, dryer, fireplace, plastic

**6. To what extent did we achieve our purpose?**

Assess the outcome of the inquiry by providing evidence of students' understanding of the central idea. The reflections of all teachers involved in the planning and teaching of the inquiry should be included.

How you could improve on the assessment task(s) so that you would have a more accurate picture of each student's understanding of the central idea.

What was the evidence that connections were made between the central idea and the transdisciplinary theme?

**7. To what extent did we include the elements of the PYP?**

What were the learning experiences that enabled students to:

- develop an understanding of the concepts identified in "What do we want to learn?"
- demonstrate the learning and application of particular transdisciplinary skills?
- develop particular attributes of the learner profile and/or attitudes?

In each case, explain your selection.

**8. What student-initiated inquiries arose from the learning?**

Record a range of student-initiated inquiries and student questions and highlight any that were incorporated into the teaching and learning.

At this point teachers should go back to box 2 “What do we want to learn” and highlight the teacher questions/provocations that were most effective in driving the inquiries.

**What student-initiated actions arose from the learning?**

Record student-initiated actions taken by individuals or groups showing their ability to reflect, to choose and to act.

**9. Teacher notes**

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Transdisciplinary Theme:

Starting Ending Date of Planner:

Document for every subject.

Math Stand Alone TEKS

Wk 1

Wk 2

Wk 3

Wk 4

Wk 5

Wk 6