1. What is our purpose?
Water makes up 80% of the Earth. Let's find out what we can know about it!

To inquire into the following:

Transdisciplinary theme:
Sharing the Planet

Central idea
The ocean is a vital physical resource in the world and protecting it plays a key role in sustaining our environment

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?

- Students will come up with an action to help preserve our oceans and create a poster to inform others about what they can do to preserve the oceans (Rubric)
- Students will research a specific animal from the ocean and create a poster, or presentation of some sort (rubric)
- Students will create a diorama of the earth. They will include the different oceans and land areas. Students will use this to represent the 80/20 with water over land on earth (checklist)

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?

Key Concepts:
- Students will understand how the oceans have layers that influence the different organism living in each layer (function)
- Students will know that oceans are a limited resource (causation)
- Students will know that being a member of this planet means that we have responsibilities to it (responsibility)

What lines of inquiry will define the scope of the inquiry into the central idea?
1. What are the different bodies of water and how do they differ as in size, and temperature?
2. What type of organism do we find in oceans? Are some endangered?
3. How do people use the ocean to transport things? (export/import)
4. What are the effects of ocean liners, tankers on that environment?

What teacher questions/provocations will drive these inquiries?
- Why does our planet have water systems such as oceans?
- How does water work to aid transport of goods and people?

Learner Profile Focus
Attribute: Open-Minded and Balanced
Attitude: Enthusiastic
### 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?

**Pre-Assessment:**

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

Have students create a map of what the world looks like to them and tell them they must use colors to represent what they feel is needed on the map. Then have students show what types of resources we use the ocean for and what animals would live in the ocean.

Students being able to explain and elaborate on what they are telling with detail

Students will be able to explain how they can use the ocean as a resource and describe what they can do to continue to use this natural resource in their lives and how they are going to change their life to make sure we continue to have the ocean as a resource

1. Students work in small groups to create a map of the earth oceans (checklist)
2. Students will create their own diorama of what the ocean looks like (rubric)
3. Students will research and present on an ocean animal (checklist)

Students will create a way they can help to continue to use the ocean as a resource (checklist)

### 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?

How many types of a certain animal are there and how do they move in the water? Students will research different ocean animals and present to their peers

How do waves get so powerful? Students will participate in science experiments with learning about how water moves

How many different animals live in the ocean? Students will present their findings from their animal research projects

Why are there tsunamis? Students will watch power points, listen to stories and video clips about how different natural disasters occur in the water.

What kind of fish swim in the deepest part of the ocean? Students will create dioramas to symbolize different levels of the ocean

What are dolphins as babies? Students will learn about the life cycle of animals and create a life cycle mobile of different animals

How do people get things from one side of the ocean to the other? Students will explore the different types of transportation and create small versions of their favorite one

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

- Thinking Skills: students will use prior knowledge, questioning, data collection, sharing and inquiry to ask/answer about oceans.
- Communication skills: collaborating and presenting information regarding gathered information on Oceans and its significance.

**Learner profile reflections:**

Principled: Students create a principled view on the Earth by displaying a sense of fairness and respect for the dignity of Earth and their actions they will take to be responsible in continuing to take care of the Earth as a resource.

Balanced: students create a physical balance to their well-beings as they work in a respectful way toward the Earth as a resource.
5. What resources need to be gathered?

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

Scholastic- Let’s Find Out Weekly Reader How Would it Be ...To Live in the Sea? Life in the ocean isn’t easy! How do the animals that live there survive?

Classroom artifacts brought in from Shedd Aquarium

Field trip to Shedd Aquarium and Brookfield Zoo

Power point presentation and videos will be watched showing examples

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

Students will create posters to positively help the school to understand how important it is to take care of our natural resources

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

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.

The students were really into sea life this year. It is probably due to the number of children’s books that are available in our classroom libraries. This has provided a great opportunity for students to read, learn, see and discuss the importance of sea creatures and their habitat. Having presentations summing up the students research was a great way show understanding and be an expert on particular sea life. Next year, we might focus more on the water rather than on the life in the water.

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.

We could talk more about how access (or lack of) water affects people’s way of living.

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

(Communication) - Students create small group presentations about the Ocean of their choice.

(Thinking Skills) - Students used prior knowledge, questioning, data collection, sharing and inquiry to ask/answer about oceans.

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?”

The students were able to understand the function that the layers of the ocean had influence over what part of the ocean the organisms were found. They used picture books and on-line tools to create a visual understanding. The students were able to better understand the layers (zones) through these visual representations and therefore began to conceptualize how the ocean works and how it is a resource belonging to the whole planet. Through the study of National Geographic Kids the students started to understand the causation of the ocean as a limited resource; through prevent landfill waste and how we use water. This also guided students in the role we play as human beings and the responsibility, we have to our planet.

- Demonstrate the learning and application of particular transdisciplinary skills?

This unit allows students to develop in each of the five transdisciplinary skills. They are immersed in discussion about the Ocean and its waters. They self-manage and show thinking skills as they make water aware choices. They research as they look through books, search the newspaper for weather forecasts, etc.

- Develop particular attributes of the learner profile and/or attitudes?

In each case, explain your selection.

When my students began to understand all the organisms that live in the ocean and how the ocean works, they became extremely enthusiastic about ways we can take better care of the ocean. They would write and illustrate pictures of children picking up garbage and no loitering signs. The students also created lists of ways to reduce energy by riding a bike, walking and using public transportation.
Reflecting on the inquiry
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.

1. What do the fish in the oceans eat?
2. How do fish stay alive when it is winter time?
3. How can we clean oceans, lakes and rivers?

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?

- “If I had a $100 I would help clean the garbage from the beaches”
- Resources such as books and additional websites were brought in to class by students.

9. Teacher notes

Relevant Vocabulary:

Uploads photographs of the work

Español- Language Acquisition PYP activity. Kindergarten students will learn of the Día de los muertos family celebration, tradition and customs. Students will create Papel Picado which is a traditional paper art form that represents the spirits and souls that return to visit their loved ones.