



# Inventor's Log

## Part I - Developing Your Idea!

This belongs to:



The oceans cover 70% of our planet. They are where life started, and we simply wouldn't survive without them. Plastics, climate change, overpopulation and other problems are all putting our oceans at risk.



But we can start building a better future for our oceans...

WITH YOUR HELP!

We are sure you can invent the best ideas to look after the oceans and all life in and out of them.





NSERC and the Canadian Commission for UNESCO are inviting YOU to take on the new Little Inventors challenge, **Mission: Protect our oceans.** 

#### To get you started

**1.** <u>Download</u> our **Mission: Protect our oceans** resource packs for free, and have a go at inventing to improve our oceans' health.

2. Come up with an invention idea and draw it!

3. submit it on the website to be included in the challenge.

4. use the inventor's log to develop your idea further!

The challenge pack will give you lots of facts on sea life and habitats, why the oceans matter and on what main threats and challenge our oceans' health.

#### Some brilliant prizes to look forward to

After you submit your invention idea to be part of **Mission: Protect our oceans**, some of the invention ideas will be developed and brought together in a unique Canadian exhibition to celebrate the launch of the **United Nations Decade of Ocean Science for Sustainable Development** in 2021. The two top inventors will be invited to attend the celebration!

A few others will have the wonderful opportunity to submit their ideas to the **Canadian Science Fair Journal** and be published!

But that's not all! We will also choose one inventor a month to receive a copy of the Little Inventors Handbook!

All you need to do is upload your invention to <u>nserc.littleinventors.org</u>.

### Your inventor's log

This log is all yours, to help you explore your idea to its fullest potential! You will find lots of activities here:

- Your ocean explorer profile
- Top tips to get inventing
- What do you think of your idea?
- How you can expand your thinking
- What's the story: write a story for your invention
- My invention comics: another way to tell your story
- Swap it up: extend your invention for other people

And when you're done, you can also check out the **Inventor's Log Part II** and take a shot at prototyping your idea!



## I'm an ocean Little Inventor!

#### What do YOU think about the ocean?



Draw a picture of yourself in the ocean!

Five facts I have found out about the ocean: 

My name is	
I am years old	
I live in	
My experience of the ocean	
What I like best about the ocean:	
•	
•	
•	

The future I want for the ocean:

If I could improve ONE thing now to make the oceans healthier, it would be:

Now use the activities in the resource pack to get you started and once you have all your thoughts about the oceans ready, get inventing!

# Top tips to get inventing



### Follow that thought

Try to stop thinking for a minute. It's pretty much impossible!

Our brains are constantly taking information in and working out how to record it and how it connects with other things we know.

So trust your brain and try to catch a thought and see where it takes you!

#### Doodle away

You don't always need to know what you're drawing....

In fact, some people like to doodle and then imagine what they can see in their doodle! Have a go on a doodle sheet!

#### Keep the ideas coming. It doesn't matter if they're not great, but allowing yourself to play with an idea might lead you to

So many ideas!

another idea, or might just get it out of your brain to make room for more ideas!

### Who needs your help?

Thinking about who your invention is for is a great place to start.

It could be for someone in your family or an animal you spot while you're out and about. Imagine what they like or dislike, what they might find difficult or boring. How can you help them?

#### No problem too small

It might be how to help a snail go faster, how to water a cactus or how to protect a ladybug from the rain – no problem is too small to capture your inventive imagination!

#### Break the rules

New inventions happen when we try to think or do things differently – in other words, when we break the rules. So forget how things are supposed to work and make them happen your own way!

#### Nolimits

And of course, the opposite is also true – there is no problem too big to have a go at either!

If you worry about how to reduce the pollution in the atmosphere or how to make travel faster, safer and nonpolluting, then have a go. We need all kinds of ideas to help our planet stay green!

What might seem impossible today could well happen in the not-so-distant future.

## Your ocean invention!

(the first of many?)





## More about your idea

What inspired your idea?

What problem are you trying to solve?

If you had to add something to it, what would it be?

What if you had to remove something? How would that change your idea?

What do you like best about your idea?



# Top tips to take your idea further



Here are some ways to think more about your idea to really bring it to life, first to you and then to the world!

### Bring in extra brainpower!

Talk to different people about your idea – it might spark more ideas to make your idea better, or even start you on a new one!

### Write a story or comic!

Try writing or drawing a story where someone has a problem, and then they get to use your invention. What happens?

#### Be an internaut

Go on the Internet to see if anyone has done anything a bit like your idea. How is yours different, or how can you change it to make it unique? Inventing is often about improving something that already exists, so what's your take on it?

## Sleep on it

Not literally! But take the time to forget about your idea and come back to it with a fresh pair of eyes. What would you do differently (or not!)?

## Swap up

Your idea might be for someone or something specific. What if someone or something completely different was trying to use it? What would happen?

## Draw it again

When you've had a chance to think some more, have another go at drawing the same idea. What do you want to add or remove?

### Make a model!



## What's the story?

Now that you have come up with your invention, write or draw a short story or comic strip to show the following:



Describe who your invention is for:

What is the problem they face?

What is your invention? How is it used, and how is it helpful?



# My invention comic





# Swap it up

#### What if your invention was for ...?

Write in the bubble what would be different or what you would have to think about.



## My invention research

My Internet research:	What I would add or remove:
What other people think:	What I like best about my idea:

# And when you're ready to think of new ideas....

Use the activities in the resource packs, such as...

#### Ocean profiler

Use this profiler to capture information about ocean-related creatures or other sea dwellers!

#### Ocean state of mind

Use this mind map to think of ideas about how to protect the oceans.

#### Ocean deep dive!

Use this sheet to explore specific ideas or features of the ocean.

And plenty more...



## Invention ideas log

Other inventions I want to draw:

Challenges I want to solve:

People I want to help: