

Protect Your Home from Flooding!

#FLOODED

Grades 3 - 12

Activity



Main Objectives

Learners will complete a guided home inspection to ensure their homes are protected from flooding. Developing literacy around different types of flooding, and best practices to protect homes from rainfall and sewer backup flooding.

Learning Outcomes

By the end of this activity learners will:

- Complete a guided home inspection to ensure their homes are protected from flooding
- Develop literacy around different types of flooding, and best practices to protect homes from rainfall and sewer backup flooding

Length of Activity: 1 - 1.5 hours

Step 1: Intro to different types of floods

Step 2+3: Learn and conduct an inspection on home flood risks

Step 4+5: Report inspection results to create an action plan and fix any potential flood risks

Materials Required

- Internet-enabled device
- Assessment Rubric
- Flood:ED Backgrounder

Activity

Step 1: Learn About Different Types of Flooding

Using the backgrounder, introduce the different types of flooding that can occur. Learners will be able to focus on ways to protect property from urban flooding in this activity.

Step 2: Is Your Home at Risk of Flooding?

Before preparing your house to become resilient to flooding, it is wise to find out if your house is at risk of flooding. A good way to do this is to research your municipal flood maps and understand if your house or school falls on a floodplain. As a class, research whether your school falls on a flood plain or not and what could be potential risks of that. Learners may also complete this activity individually to find out where their house is located on a floodplain. For instance, the city of Calgary has a flood map available for the public which serves as a useful tool to plan and prepare for potential flooding:

 <https://maps.calgary.ca/riverflooding/>

Step 3: Home Flood Risk Inspection

Regardless of whether your home or school is on a flood plain or not, it is wise to periodically take necessary precautions to ensure your house is safe from the risk of flooding. Assign this task to your learners to complete the Intact Centre on Climate Adaptation's Home Flood Protection Check Up:

 <https://homefloodprotect.ca/checkup/>

This should take approximately 20-30 minutes for learners to complete. Note, learners may find it easier to do this step at home to answer the questions more accurately. A report will be emailed to them based on their answers.

Step 4: Report Results

Have your learners go through their results based on the reports they received. Discuss as a class what surprised them the most about their results, and what they learned about their own home. What were the most common risks? What were the easiest ways they could help protect their home based on their findings?

Step 5: Recommended Actions

Based on their results, allow the learners to put together an action plan to help protect their homes against flooding. Learners should determine the costs of implementing each action and consider the feasibility of taking action. Refer to the this infographic as a reference:

[3 Steps to Cost -Effective Home Flood Protection](#)

Additional recommended actions are summarized below in the table– if you took other actions, you are welcome to add them on a separate sheet and attach them to this table.

Resources Referenced

By the end of this activity learners will:

- Intact Centre on Climate Adaptation - Home Flood Protection Program: <https://homefloodprotect.ca/checkup/>
- City of Calgary Flood Readiness Guide: <https://maps.calgary.ca/riverflooding/>

Recommended Actions to Protect Your Home from Flooding	Was this risk identified in your home? If yes, explain what you found.	Did you face any challenges implementing this action? Describe.
Extend your downspouts to direct the rainwater at least 2m (6.5') away from your home. Here is a video tutorial on how to do this: https://www.youtube.com/watch?v=zcjX7EwAB1I . You can also review our Action Activity Install Rain Barrels for instructions on how to disconnect a downspout to collect rainwater in a barrel.		
You can install a plastic sheet or any waterproof covering over your window well during a rainstorm or snowstorm to prevent water from collecting in there.		
Install back-flow prevention devices (or also called backwater valves) on your pipes to stop sewage and storm water backing up and potentially flooding your basement in the event of heavy rainfall. Make sure you clean your back-flow prevention device every Spring and Fall – here is a video tutorial on how to do that: https://www.youtube.com/watch?v=drnRijhBhXs		
Install water alarms if you don't have one, you can search for smart water alarms online to look for all the different devices on the market.		

Check that you have a sump pump and that it is in good working condition. Make sure your sump pipe discharges water to the surface of your home and at least 2m away from it. Clean and test your sump pump every Spring and Fall and install a high-water level alarm in your sump pit.		
Protect all your valuable belongings and important documents by putting them in waterproof boxes.		
Clear any debris that may have accumulated over the year from your eavestroughs and downspouts every Spring and Fall.		
Inspect the area around your house to locate the local storm drains and make sure to clear any debris that has accumulated near it periodically.		