STEAM Starters

Here are some suggestions of problems, challenges and questions to inspire your next STEAM project or activity. Remember that STEAM is a way of working and to allow true creativity emerge, these should be child-led tasks, posed with short discussion on criteria required followed by collaborative group work & brainstorming on the part of the pupils. See examples of these criteria led ideas in our Resource section.

Seasonal STEAM

- Challenge: Design a bud protector for Spring
- Challenge: Design a cage that will catch the leaves from blocking the drains in Winter/Autumn but it allows the water to escape
- Problem: Seán the farmer gets very little sleep in Spring because his little lambs stay up all night playing, bleating and keeping him awake. He needs to tire those fun little lambs out during the day! Can you figure out how Seán and his family can get some sleep?

Seasonal Weather

- Problem: The school caretaker really enjoys looking after all of the flowers around the school grounds but is worried that he is wasting a lot of water every day carrying the watering can from the tap and back again. Can you design a way to collect rainwater, so that the caretaker has plenty of water to use instead of using the tap inside the school?
- Problem: Dunnes Stores wants to bring out a new affordable jacket for children transitioning from Winter to Spring. The company is looking for young customers to design such a jacket for children ages 7-11. Consider seasonal elements of the weather in your design.

The Holiday Season

- Problem: It's time for Rudolph to retire so Santa has to think about upgrading his sleigh to the 21st century. Can you design a sleigh for Santa to use this Christmas? Consider technology & engineering advances in 2020. Create a prototype using previously learned knowledge of forces (wind power, rocket launches, battery energy, etc)
- Challenge: The elf is stuck on the shelf, can you design & make a device to get him down from the shelf.