

## *Chemistry | Pre-Visit Resources*

THIS SESSION, OFFERED VIRTUALLY, WILL HAVE STUDENTS THINKING LIKE A SCIENTIST. LEARNERS WILL EXPLORE CHEMISTRY THROUGH A SERIES OF DEMOS AND HANDS-ON ACTIVITIES.

### **At least 1 week prior:**

- Ensuring classroom is properly configured and equipment will be available for students (see below). Science World staff are available to test set up if needed, please contact [schools@scienceworld.ca](mailto:schools@scienceworld.ca) to schedule this.

### **Class configuration:**

- In-class learners: only one computer (preferably the teacher's computer) will connect to the online learning platform. This computer should be connected to the classroom projector and to an audio system in the room, so students can hear and see the facilitator (if permitted: the camera should also be facing the students, so the facilitator can also see the students).
- Distance learners (students at another location) will need to be connected to the learning platform.
- Science World will not record this session.

### **During the session:**

- logging in to online learning platform *10 minutes prior* to workshop start time
- providing updated participant count to the facilitator
- providing moderation between students and facilitator (making sure students are on task and communicating with facilitator as needed throughout).
- delivering a demonstration! We'll guide you through this, but check out the video linked above to prepare! We will be doing the 'tower' portion of the video (at the 2 min mark) in the session.

### **Materials to have handy (60 minute session ONLY):**

- Review Cabbage Juice Indicator video and instructions:  
<https://www.scienceworld.ca/resource/cabbage-juice-indicator/>
- We are going to be leading an activity called Cabbage Juice indicators which will explore acids and bases. We would love for either the teacher or each student to be able to *chem-along* with us while we explore. That will mean some supplies (including making cabbage juice) would be required in advance:
  - Red Cabbage Solution:
    - Heat proof bowl or cup
    - Boiling water

- Sharp knife
- Strainer
- A variety of household substances, such as:
  - Lemon juice (citric acid)
  - Vinegar (acetic acid)
  - Baking soda (sodium bicarbonate, a base)
  - Washing soda (sodium carbonate, a base)
  - Cream of tartar (potassium bitartrate, an acid)
  - Antacids (various bases)
  - Soda water (carbonic acid)
  - Ammonia (a strong base)
  - Ivory soap (not detergent, a base)