Activity: Online Meeting Scavenger Hunt

FOR THE TEACHER

Summary
In this activity, students will work in teams on a virtual meeting platform to find as many objects as possible from a comprehensive scavenger hunt list within their homes during a given timeframe. The items on the list provided in this activity are related to organic chemistry topics, however the list can be easily modified for use with many chemistry topics.

Grade Level
High and Middle School

NGSS Alignment
This activity will help prepare your students to meet the performance expectations in the following standards:
- Engaging in Argument from evidence
- Obtaining, evaluating, and communicating information

Objectives
By the end of this activity, students should be able to:
- Successfully work cooperatively as a team, or small group using a digital platform such as Google Meet or Zoom.
- Identify household items that meet given criteria related to chemistry.
- Make connections between chemistry content and everyday items found in their homes.

Chemistry Topics
This activity supports students’ understanding of:
- Organic chemistry
- Review
- Culminating task

Time
Teacher Preparation: time will vary depending on if a new item list needs to be created
Lesson: ~60-70 minutes
- Introduction: ~10 minutes
- Scavenger Hunt: ~ 20 minutes
- Review of items/class discussion: ~40 minutes

Materials
- Computer or device with a webcam
- Online virtual meeting platform (Google Meet, Zoom, etc.)
- Large bin/bag (per student)
- Various household items
- Scavenger Hunt list

Safety
- No specific safety precautions need to be observed for this activity.
Teacher Notes

- To learn more about this activity, read the corresponding article, *Using an Online Meeting Scavenger Hunt to Offer Kinesthetic Learning*, published in the September 2020 issue of *Chemistry Solutions*.
- Students should use an online meeting platform such as Google Meet at a designated date and time.
- To begin, each student should be instructed to get a large bin or bag to use to gather their items.
- Teachers should present the following rules on the screen and review each with the students:
  - Gather as many of the items as you can during the 20-minute time limit.
  - No objects may be used more than once.
  - No digital images may be used unless the photo is taken during the scavenger hunt.
  - All objects must be G-rated and cannot be controlled substances.
  - 1 point is earned for each item found.
  - 3 bonus points are earned for any item found, that is not found by the other team.
  - No communication may be made between teams.
  - You may communicate with your own team members.
  - The team with the highest point total wins!
- Students should be divided into teams. The teams can be large or small. For example, in my class there were two teams, each with 11 students.
- A group chat or breakout room should be set up for each team. This permits the teams to work cooperatively, sharing ideas for what objects could be used.
- Students are told that they can take a photo or screenshot of the scavenger hunt list to carry with them as they search their home for specific objects. They are instructed to set an alarm for twenty minutes and to return to the meeting screen when the timer rings. Each student begins the hunt without seeing the list in advance of the online activity.
- During the allotted twenty minutes for the scavenger hunt it is important that the teacher stay in the virtual meeting in case students return to their screen early with a question.
- After twenty minutes, the students return to their screens. Students are not permitted to collect any additional items after the time has ended.
- I suggest creating a PowerPoint presentation that shows possible correct answers to each of the scavenger hunt items. Using images and a written list is helpful. An Answer Key document (written list) is provided for the organic chemistry scavenger hunt activity.
- I suggest that the teacher should go through each scavenger hunt item, and ask students to hold up their objects to be viewed in order to validate the objects. Students can keep track of their own points, or someone can be designated as a score keeper.
- When I used this activity, I created class discussions by asking students to defend why they chose a specific object. This also helped students to recall class material.
- Note that a number of scavenger hunt items on the list provided are just for fun or are related to general chemistry rather than specifically organic chemistry. I encourage you to do the same.

Modifications:

- This layout can be modified by reducing the number of items on the list or changing the amount of time given for the hunt.
- Additionally this activity can be modified to be used with other chemistry topics. Note that when developing a scavenger hunt list, it should include items ranging from easily accessible to scarce. Refer to the related article for more ideas.
- If a student is physically restricted, they could use the internet to find photos of only the items they know they have in their home and take a screenshot of those items.