1) Who is Roger Bacon and what did he invent? (See Who is Roger Bacon, p1 and BBC History)

2) Why is it important to remember scientists such as Roger Bacon? Can you think of any other early scientists who have made a big difference to our lives?

3) Young scientists on the Roger Bacon Scholar’s programme are taught to communicate their knowledge to children, the public and people working in industry. Why is this important? (See In what way are the students making a difference? p2)

4) Students on the programme are also encouraged to develop their creativity and critical thinking. What does critical thinking mean? (See In what way are the students making a difference? p2)

5) Kaitelyn Vachon talked to a class of kindergarten children about her research on sea anemones. What will those kindergarten children get out of her talk? (See Kaitelyn Vachon, Q&A, p3)

6) Similarly, why is it important for us to learn about her work on clothianidin? (See Kaitelyn Vachon, Q&A, p3)

7) Peter Mitchell helped students at DeKalb High School with their Mutation Invasion project, and to plan out their computer games. What mistakes did he make in his own planning, and what lessons was he able to share with the students? (See Peter Mitchell, Q&A, p4)

8) The high school students working with Peter were asked to present their game ideas to a panel of judges. How will this experience benefit them in the future? (See Peter Mitchell, Q&A, p4)

9) What are the challenges of presenting a science project to a younger audience such as kindergarten children? How would you overcome these challenges?

- **SCIENCE COMMUNICATION WITH THE UNIVERSITY OF SAINT FRANCIS**

- **TALKING POINTS**

- **ACTIVITIES YOU CAN DO AT SCHOOL, COLLEGE OR AT HOME**

- **ARE YOU ANY GOOD AT EXPLAINING?**
You may think you have explained something well, but has your listener really understood? Find out if you’re any good at explaining with this drawing activity. Divide yourselves into small groups of 2, 3 or 4. You’ll each need a sheet of blank paper and a pen. One of you starts by drawing a picture, while the others time you for 2 minutes. Make sure they can’t see what you’re drawing. When the time is up, explain what you have drawn to person number 2 (don’t let the others in the group hear you) so that they can have a go at drawing the same picture as you without seeing it. Repeat until all members of the group have tried to draw the same picture as you. How successful were you at explaining? Did all the group members draw the picture correctly? If the answer is yes, then you must be a pretty good communicator!

- **CREATE A SCIENCE CAFÉ**
A science café is an event that’s open to anyone interested in science. It can be a weekly, monthly or one-off event, and the aim is to create lively discussions about any science topic. You could invite a scientist, science teacher or STEM ambassador to your café to give a talk. You could ask café members to present a topic such as a recent invention or science problem. You could use the science café to complete the activities on the Futurum website, and much, much more.

The Teen Science Café Network has lots of ideas on how to set up a science café in your school. And, if you’re based in the US, it also has a list of cafés that have already been set up around the country. Check out: https://teensciencecafe.org