### **Additional resources**

MSU Extension has created a webpage with additional science resources which can be found at:

#### 4h.msue.msu.edu/4h/science\_blast

The site includes black and white versions of all of the student handouts making the materials more useful for those who wish to print copies. The site also contains additional science resources and links to other helpful websites.

activities. Leaders can look for opportunities to build these activities into club meetings, perhaps dedicating one session/meeting per month to these lessons. We believe that growing science knowledge is best accomplished through hands-on learning activities that demystify science as it happens in the world around us and engages the attention of youth who may or may not have a passion for the topic.

## **Assessment**

Assessment is an essential component of the learning process. We have included some general questions in the check for understanding section within most lessons. Here is some additional information on assessment and ways to check that learners are achieving the objectives in each activity.

(The following information was written by Dr. Jennifer E. Rivera, Asst. Professor; Department of Community, Agriculture, Recreation and Resource Studies, Michigan State University. For more information on authentic assessment visit the **Authentic Assessment Toolbox** at: http://jfmueller.faculty.noctrl.edu/toolbox/index.htm)

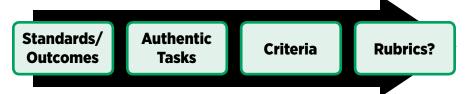
#### What is Assessment?

Assessment is the systematic collection of information about student learning, using the time, knowledge, expertise, and resources available, in order to make decisions about how to inform and improve student learning.

#### So what is Authentic Assessment?

When students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skill, they are providing authentic assessment.

# What is the development process for Authentic Assessment?



#### **Developing Standards:**

What should the students know and be able to do? The list of knowledge and skills become your standards. A three-step process is recommended for writing standards (1) REFLECT, (2) REVIEW, and (3) WRITE.

#### **Learning Outcomes:**

**KNOWLEDGE =** What do I want my students to **KNOW** as a result of this educational experience?

**SKILLS =** What do I want my students to be able to **DO** as a result of this educational experience?