

Day 1 Script

Teacher:

Welcome to a new season of Survivor: Sonoran Desert. We've searched around the world to find the best contestants capable of competing in the extreme desert conditions of the Sonoran Desert. With temperatures soaring to over 100 degrees daily, your body must be specially designed to withstand the heat. These flatlands offer little shade and even less sustenance. The Sonoran desert is poised to be our most challenging venue yet. But will our contestants be up for the challenge?

Okabi:

My name is Okabi ostrich and I hail from the desert regions of Africa. I'm 15 years old and I'm here to win! Some people may not immediately think of ostriches when you think of the desert environment, but trust me - we are born desert survivors. My body is built for this kind of environment, and I believe that I will be the ultimate survivor.

Justin:

Hi, I'm Justin Jackrabbit. I'm from Arizona and I'm ready to play. I think that lots of people will look at me and think, hey. He's small, he's cute... no way this guy is going to beat me in Survivor. But trust me, I know what I'm doing, and I know what it takes to survive in this kind of environment. I may be the underdog in this competition, but I will be the top dog when it's said and done.

Cole:

I'm Cole Camel and I will be the last survivor standing. The desert is my home. When people hear the word desert and animal together, you know they are picturing a camel. I've got a ridiculous amount of endurance and a lot of spunk. When this competition is over, these jokers are going to wish they had never met me.

Teacher:

Now that we've met the contestants. Let's take a moment to make some predictions about who is going to win Survivor: Sonoran Desert. I've broken you into groups and you are going to discuss the answers to the questions on the worksheets I will provide you. You do not have to agree on the answers, but at least listen to what everyone has to say before you make your final prediction.

Name: _____

Date : _____

Day 1 Prediction Worksheet

You will have **15 minutes to talk as a group.**

In your groups, discuss the answers to the following questions. Do not write your prediction down until everyone in your group has had a chance to share what they think.

A.

B. 1) Who do you think is going to win this competition? **Circle one.**

Okapi Ostrich



Justin Jackrabbit



Cole Camel



2) **Why** do you think the animal you picked is best suited to win?

3) What **evidence** do you have for this guess? Explain your answer fully.

Day 2 Script

Host: Welcome survivors to Sonoran Desert. You will be stranded here together for 7 grueling days of competition, but only one of you will remain standing at the end. Anyone want to catch a flight home before we start?

All: NO!

Camel: Let's do this.

Ostrich: I'm ready.

Host: Ok. Part of desert survival is being able to get the resources you need to survive. This means water and food. You will all be separated to a different part of the desert and you will have to survive for seven days on your own. Our medical team will be looking out for you, so if you don't feel like you can go on, just wave the red flag that I'm handing you. Good luck contestants.

Camel: What a joke. That bunny and bird are going to be a coyote's lunch before sunrise on day 2. Have you seen me? I'm a virtual resource warehouse. Good thing I filled up at the watering hole before I arrived.

Ostrich: Hmm, the Sonoran desert looks a little different from my home desert. I may need to stretch these legs and look for a place to fill up.

Jackrabbit: This challenge is going to be a piece of cake. Let me at those cactus.

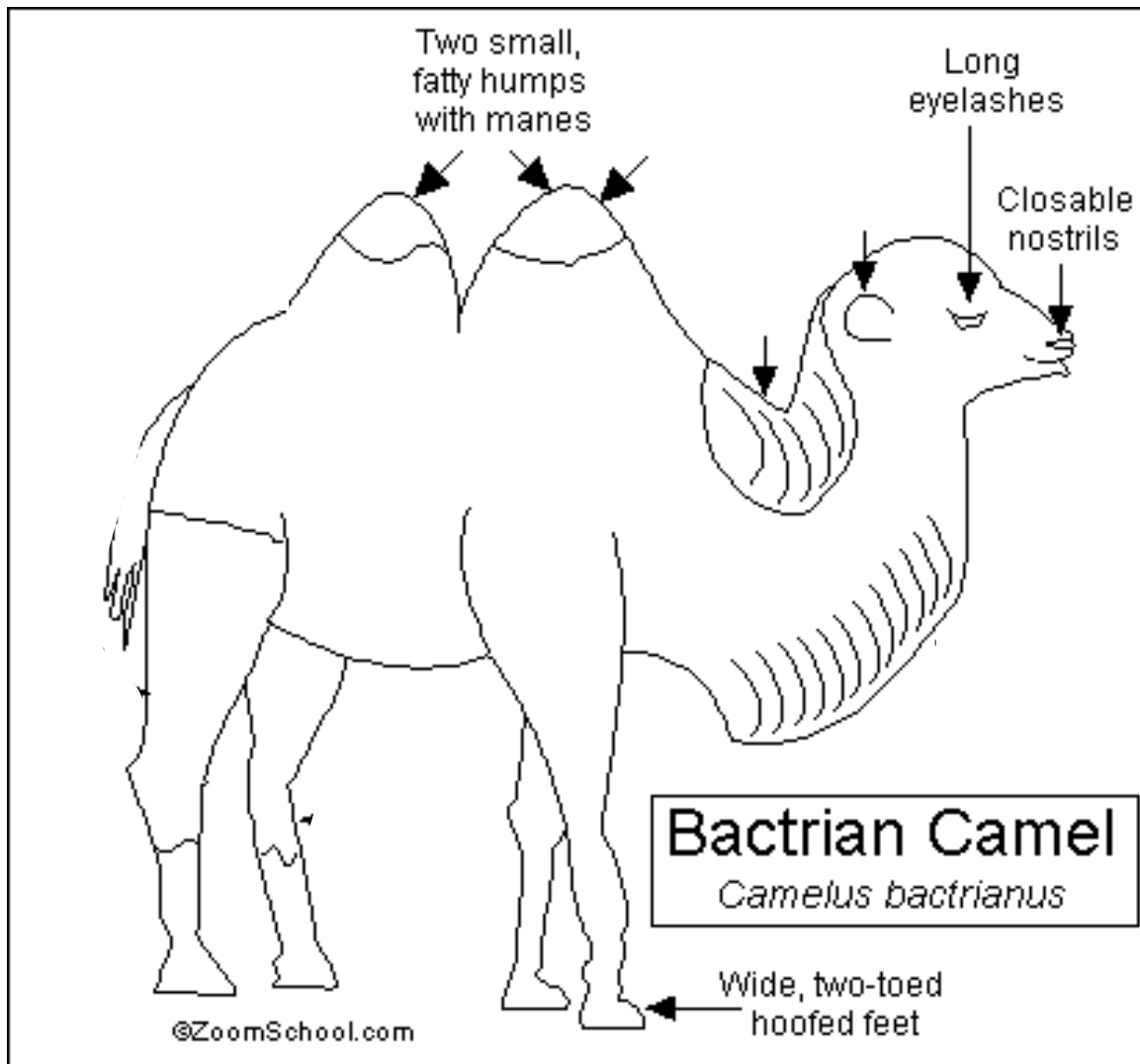
Teacher: Our camel, ostrich and jackrabbit are all being moved to different places around the Sonoran desert. We'll check in on them after the first five days on their own. Our host told them that they will have to find food and water on their own. I wonder where they will find these things in the desert? Let's find out more about these animals which may help us figure that out.

Pre-Research Questions

1) What do you think camels eat?

2) Where do you think camels get their water?

3) What is it like where (Bactrian) camels live?



Animal Expert Sheet

Animal: Cole Camel

Hometown Desert: Gobi Desert

What does he eat?

Where does he find water?

How does he stay warm?

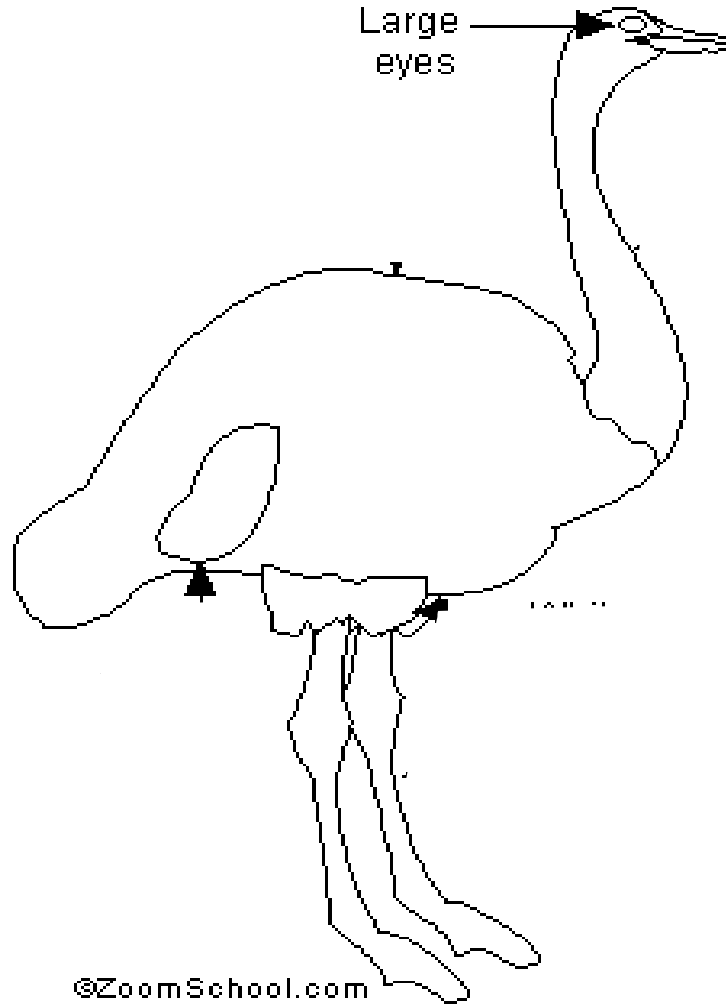
What kinds of special body parts does he have?

Pre-Research Questions

1) What do you think ostriches eat?

2) Where do you think ostriches get their water?

3) What is it like where ostriches live?



Animal Expert Sheet

Animal: Okapi Ostrich

Hometown Desert: Sahara Desert

What does she eat?

Where does she find water?

How does she stay cool?

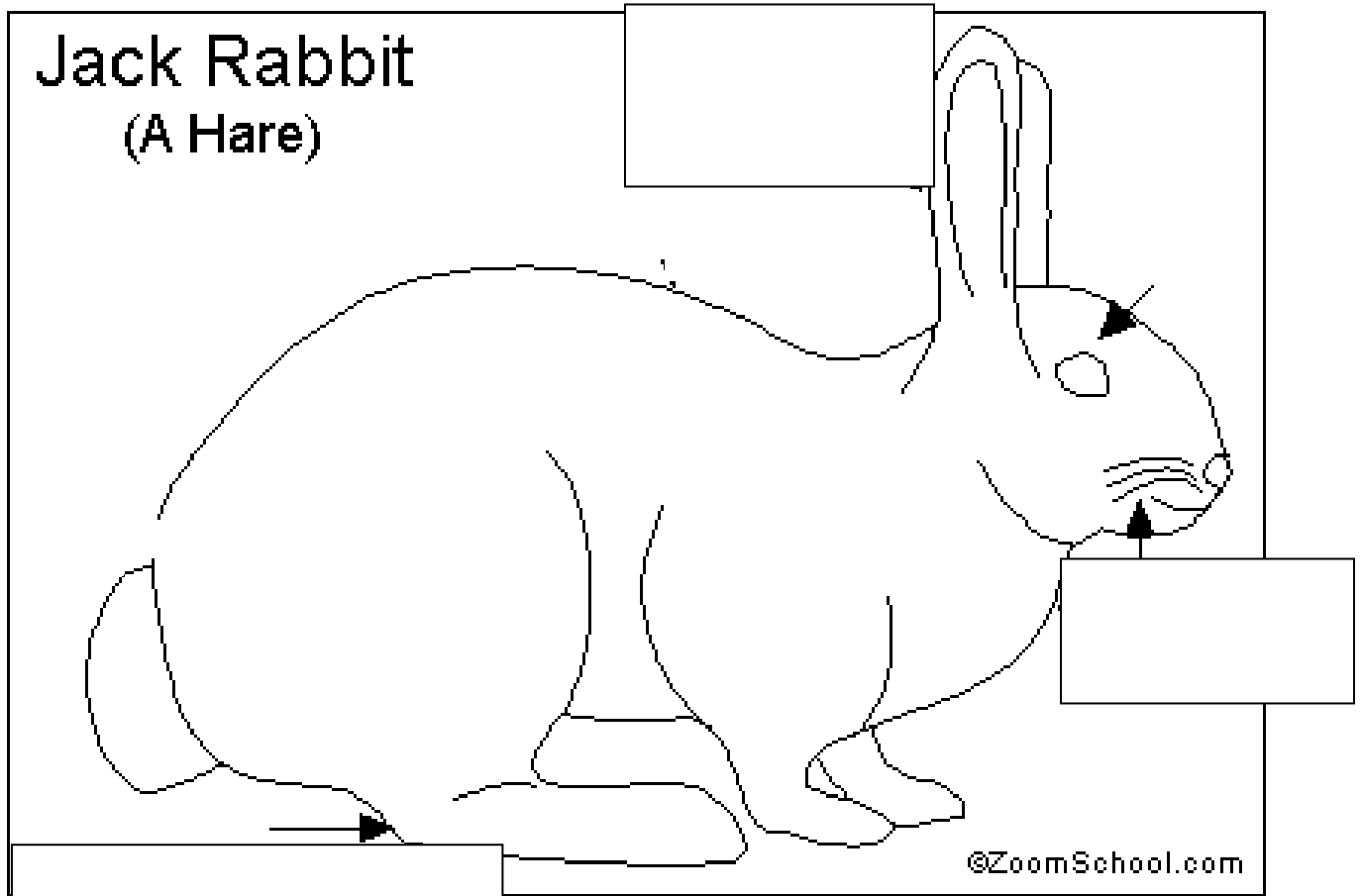
What kinds of special body parts does she have?

Pre-Research Questions

1) What do you think jackrabbits eat?

2) Where do you think jackrabbits get their water?

3) What is it like where jackrabbits live?



Animal Expert Sheet

Animal: Justin Jackrabbit

Hometown Desert: Mojave Desert

What does he eat?

Where does he find water?

How does he stay cool?

What kinds of special body parts does he have?

Day 3: Mid-competition

Host: It's been 5 days since we sent our competitors into the dry, wasteland of the Sonoran desert. Let's check in with them and see how they are faring.

Camel: Mercy me, it is hot, hot, hot here in the Sonoran. The Gobi desert is cool in the summer, but this is about as uncool as you can get.

Ostrich: Aah, the weather has been beautiful, but they dropped us off in the middle of this canyon where all I can see are these tall, prickly plants, rocks and ugly bushes. I think I might be able to make something out of this grass, but where is the water?

Jackrabbit: This is home sweet home to me. I've got everything I need right here. I could last another 5 years, but these guys, I think they are going to be begging for mercy soon enough. Oh wait, camel already did.... Ha, Ha! Now where I can take a nap?

Teacher: You now know a lot about the competitors themselves, but you need to learn a little bit more about where they come from in order to refine your predictions about who will be the ultimate survivor.

Lets look at some pictures of the hometown deserts. You are going to make observations on the T chart that is appropriate for the hometown desert of the competitor you picked. Then we will compare these observations to those we make about the Sonoran desert.

Name: _____

Animal: Cole the Camel

Gobi Desert	Sonoran Desert
What do you see?	What do you see?

1) How are the Gobi Desert and the Sonoran Desert **similar**?

2) How are the Gobi Desert and the Sonoran Desert **different**?

Cole Camel

<i>Gobi Desert</i>		<i>Sonoran Desert</i>
7.6 inches per year	← Rain →	3 to 16 inches per year
-27 degrees to 110 degrees (Extremely cold to hot)	← Temperature →	90 - 120 degrees (Really, really hot! – think hottest summer day)
Mostly rocky	← Land →	Mostly rocky, grassy in some parts, trees in others
Grasses and bushes	← Plants →	Cactus and Creosote bush
gazelles, polecats, camels, and few birds.	← Animals →	Wolves, Owls, snakes, Eagles, mountain lion, Different kinds of birds
Very salty water, some streams, but mostly snow	← Water →	Water found inside cactus, some rivers in far away places

1) What part of being in the Sonoran desert will be **easy** for Cole the Camel?

2) What part of being in the Sonoran desert will be **hard** for Cole the Camel?

Name: _____

Animal: Justin the Jackrabbit

Mojave Desert	Sonoran Desert
What do you see?	What do you see?

1) How are the Mojave Desert and the Sonoran Desert **similar**?

2) How are the Mojave Desert and the Sonoran Desert **different**?

Justin Jackrabbit

<i>Mojave Desert</i>		<i>Sonoran Desert</i>
2 - 2.5 inches a year	← Rain →	3 to 16 inches per year
90 - 120 degrees (Really, really hot! – think hottest summer day)	← Temperature →	90 - 120 degrees (Really, really hot! – think hottest summer day)
Rocky	← Land →	Mostly rocky, grassy in some parts, trees in others
Mostly bushes, includes the Creosote Bush, some trees	← Plants →	Cactus and Creosote bush
bats, bighorn sheep, mountain lions, deer, bobcats, jackrabbits, different kinds of birds, tortoise	← Animals →	Wolves, Owls, snakes, Eagles, mountain lion, Different kinds of birds
Water fed springs, small pools form after rainfall	← Water →	Water found inside cactus, some rivers in far away places

1) What part of being in the Sonoran desert will be **easy** for Justin the Jackrabbit?

2) What part of being in the Sonoran desert will be **hard** for Justin the Jackrabbit?

Name: _____

Animal: Okapi the Ostrich

Sahara Desert	Sonoran Desert
What do you see?	What do you see?

1) How are the Sahara Desert and the Sonoran Desert **similar**?

2) How are the Sahara Desert and the Sonoran Desert **different**?

Okabi Ostrich

<i>Sahara Desert</i>		<i>Sonoran Desert</i>
<5 inches a year, in some areas no rain at all for years at a time	← Rain →	3 to 16 inches per year
100 - 120 degrees (Really, really hot! – think hottest summer day)	← Temperature →	90 - 120 degrees (Really, really hot! – think hottest summer day)
Mostly sandy, some gravel covered areas	← Land →	Mostly rocky, grassy in some parts, trees in others
grasses, shrubs, some trees	← Plants →	Cactus and Creosote bush
hares, gazelle, lizards, ostrich, camels, fox, mongoose	← Animals →	Wolves, Owls, snakes, Eagles, mountain lion, Different kinds of birds
River, lakes, aquifers (underground water)	← Water →	Water found inside cactus, some rivers in far away places

1) What part of being in the Sonoran desert will be **easy** for Okabi the Ostrich?

2) What part of being in the Sonoran desert will be **hard** for Okabi the Ostrich?

Animal Expert Sheet

Animal: Cole Camel

Hometown Desert: Gobi Desert

What does he eat?

Where does he find water?

How does he stay warm?

What kinds of special body parts does he have?

Desert Expert T-chart

Name: _____

Animal: Cole the Camel

Gobi Desert	Sonoran Desert
What do you see?	What do you see?

3) How are the Gobi Desert and the Sonoran Desert **similar**?

4) How are the Gobi Desert and the Sonoran Desert **different**?

Prediction Worksheet

You will have **15 minutes to talk as a group.**

In your groups, discuss the answers to the following questions. Do not write your prediction down until everyone in your group has had a chance to share what they think.

C.

D. 1) Who do you think is going to win this competition? **Circle one.**

Okapi Ostrich



Justin Jackrabbit



Cole Camel



2) **Why** do you think the animal you picked is best suited to win?

3) What **evidence** do you have for this guess? Explain your answer fully.

Puppet Play Grading Rubric

	<i>Levels of Mastery</i>		
	Evidence Apprentice	Evidence Evaluator	Evidence Expert
Available Resources	The student wrote an ending to the play which was unreasonable considering the resources available to their animal; their writing needed support for their rationale.	The student wrote an ending to the play which was acceptable considering the resources available to their animal; their writing needed additional support for their rationale.	The student's explanation of why their animal might be the ultimate survivor was well reasoned considering the available resources; their writing provided support for their rationale.
Physical/Behavioral Adaptations	The student's explanation of why their animal might be the ultimate survivor was unreasonable considering their animal's physical/behavioral adaptations; their writing needed support	The student's explanation of why their animal might be the ultimate survivor was acceptable considering their animal's physical/behavioral adaptations; their writing needed	The student's explanation of why their animal might be the ultimate survivor was most reasonable considering their animal's physical/behavioral adaptations; their writing provided

	for their rationale.	additional support for their rationale.	support for their rationale.
Provision of Evidence	The student needed empirical data to support their possible outcome.	The student provided some empirical data to support their possible outcome.	The student used adequate empirical data which supported their possible outcome.
Scientific Discourse	The student needed additional practice in contributing equally during group discussion including listening to others' comments, sharing their own ideas, or asking questions of other group members.	The student began to participate in group discussion; the student needs additional practice in either listening to others' comments, sharing their own ideas, or asking questions of other group members.	The student listened to other group members comments, asked questions, and shared their own ideas.

Safety First: Elementary Science Internet Activity Assignments

By Dr. Ken Roy – NSTA Chief Science Safety Compliance Consultant

I. INTRODUCTION:

The Internet offers a spectrum of exciting opportunities for students to enhance their doing and understanding of science with the click of a computer mouse. A variety of formats including hands-on activities, science fair projects, informational research information, videos, and much more are available. Unfortunately, security needs to be contended with, including disclosing of personal information, computer viruses, spyware, and access to inappropriate sites and individuals.

Safety also needs to be addressed. If students are assigned a project that involves exploration and carrying out of an activity found on the Internet, there is potential for an accident, whether done in the home or school classroom. There also is the potential for shared liability involving both the teacher who made the assignment and the school district. How can elementary teachers make better and safer use of the Internet for students? The following are strategies and actions for serious consideration based on professional best practices and legal safety standards. Elementary teachers of science should review and apply these strategies and actions before assigning use of Internet based project assignments.

II. INTERNET USE STRATEGIES:

1. Most school districts have developed Board of Education (BOE) Internet use policies for students and employees. Before having students work on the Internet as the source for or part of an assignment, always first secure, review and adhere to the BOE Internet policy.
2. Develop an Internet assignment safety acknowledgment form which notes both the advantages and potential hazards of the Internet. Encourage parents/guardians to be involved in the assignment by directly supervising the student's Internet surfing. Both the student and parent/guardian should sign and date the acknowledgment form. Keep the forms in a safe place once signed. A good place to start can be found in the online document titled "Common Sense media agreement for parents and kids grades K-5" found at: www.common sense media.org/sites/default/files/fma-elementary.pdf
3. Remember that if a student is doing a school related science project/activity using websites that were assigned, the teacher and school may have shared liability should there be a safety incident. Make sure all aspects of safety are directly reviewed with students and noted on the acknowledgment form before the activity is assigned.
4. Providing internet assignments for science should be minimally a two-step process:
 - A. First, develop a specific science curriculum related research lesson or activity which requires student access to one specific Internet site. Review the results of the experience with students to make sure they not only understand the curriculum piece but also the process using the technology including safety and security.
 - B. Second, once comfortable with student progress, again review the safety acknowledgment form contents. Then proceed to incrementally assign research lessons or activities in steps or pieces until students can work totally on their own with the noted safeguards in place. Always assign an Internet based or assisted activity with a

- prescribed outcome or product. Consider a science research report, science project, journal activity, and printouts of pictures or other graphics.
5. Whether in the classroom or home, keep the computer in a central place so it can be monitored.
 6. Always suggest safer, age-appropriate websites for student use after they have been first directly reviewed by the teacher. Consideration should be given to the following:
 - E. Make sure the reading level and volume of written information is age-appropriate for the students using the site.
 - F. Check to be certain the site information correlates with the assigned research or activity.
 - G. Check out graphics, pictures, and videos relative to fostering student understanding.
 - H. Note if the information is based on scientific fact or opinion. Review the difference between an authoritative website, such as a government, university, or professional site, and one that may not provide accurate information, such as a blog or other personal sites.
 - I. Be sensitive to the source and age of the information.
 - J. Check for advertisements and appropriateness for students. Remind students they are not to click on advertisements!
 - K. Be certain to check out links that may be provided. Let them know if there are any links that should be avoided.
 - L. Some sites require plug-ins or other software on the computer. Either avoid these sites or make sure appropriate software is installed prior to students using the site.
 7. Suggest that parents use filtering software with settings for young students to limit inappropriate exposure on the Internet.
 8. Remind students that there are individuals on the Internet who are not who they say they are. If they do not know who is talking to them, they should not respond.
 9. Once students decide on a science activity they retrieve online, they should be instructed to share it with the teacher for approval before working on the activity.
 10. Make sure students understand the importance of typing the correct website addresses. Put into place rules to follow in case students end up on an inappropriate site.
 11. Examples of child-safe general search engines include the following:
 - A. [OneKey - The Kid Safe Search Engine](http://www.onekey.com) www.onekey.com
Search engine with a large database of kid-safe sites.
 - B. [AOL NetFind Kids Only](http://kids.aol.com/) <http://kids.aol.com/>
A search engine that links only to sites that are safe for kids.
 - C. [Yahooligans!](http://www.yahooligans.com/) www.yahooligans.com/
Child-safe search engine. Not reviewed for educational relevancy.
 - D. [Searchopolis](http://www.searchopolis.com/) www.searchopolis.com/
Sites found were screened for inappropriate language, etc., but not for educational relevance. A lot of commercial and advertising sites were found.
 - E. [Ask Jeeves for Kids](http://www.mmscrusaders.com/lib/find/ajkids.htm) www.mmscrusaders.com/lib/find/ajkids.htm
Ask a question in plain English instead of using key words. AJ will tell you what questions he does have answers for that might be similar to yours. Only "G-rated" web pages and web pages written specifically for children are included in this knowledge base.

III. TOP 10 SAFETY “DO’S” and “DON’TS” FOR SCIENCE ACTIVITIES:

The following list of 10 safety “do” and “don’ts” for students, teachers and parents should be posted in the science classroom and also noted in the safety acknowledgment form. Remember to review the list with students prior to assigning science activities, including Internet secured activities. The list in poster format is available at: www.nsta.org/pdfs/Top10SafetyTipsPoster.pdf.

1. If it can splash in your face, you need to protect your space: Goggles On!
2. Don’t just stash your trash! What can cut you, can cut the person after you: put all sharp broken material in its proper disposal container—NOT in the trash!
3. If it can grow on you, it shouldn’t be grown in the lab!
4. Wash your hands, wash your hands, wash your hands!
5. What burns can’t learn: tie back that hair and use goggles, gloves, and aprons whenever working with flame and/or chemicals.
6. See Johnny play with sharp tool without prior instruction on its safe use! See Johnny lose a piece of his anatomy! See Johnny’s teacher get sued back to the Stone Age!
7. Remember! The live animal or plant you just used for the “Ooh! Wow!” moment will still be around after you’re done. Prepare in advance for its proper long-term care and/or responsible disposal.
8. A cluttered lab is an accident waiting to happen.
9. When in doubt, throw it out—into a biohazard safety bag for proper disposal!
10. Just because you and children can think of it, doesn’t mean any of you should try it: think that lesson through beforehand! PLAN AHEAD! PLAN AHEAD! PLAN AHEAD!

Additional safety information for elementary science can be found in the document titled “Science and Safety: It’s Elementary” by the Council of State Science Supervisors at: www.sde.ct.gov/sde/lib/sde/pdf/curriculum/science/safety/scisaf_cal.pdf