

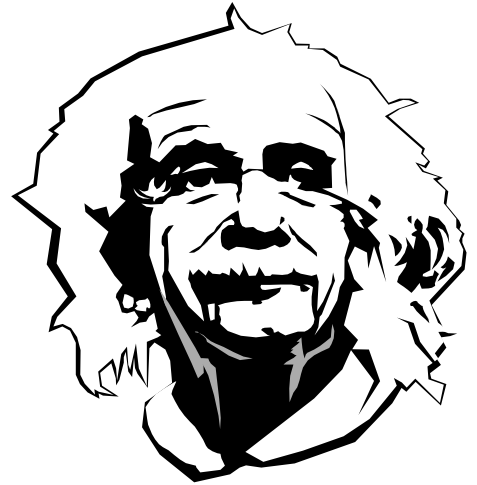
ANIMAL INVENTORS

TEACHER STUDY GUIDE

(PLEASE COPY AND GIVE TO TEACHERS BEFORE ASSEMBLY)

Come visit Professor Gizmo Gearloose to learn about the
GREATEST INVENTOR of all times...Mother Nature!
Scientists call her inventions *adaptations*.

Adaptations are any special feature that a plant or animal
develops to help them meet their needs. Plants and animals
have many special adaptations that help them survive in the
cold, cruel world.



An *invention* is a device that people use to help them meet their needs.
Most of the inventions that people have devised are actually duplications
of plant and animal adaptations.

Compare the adaptations of animals and plants to copycat human inventions.

THINGS TO PONDER *CLASSROOM DISCUSSION QUESTIONS...*

- What animal or plant do you know with a special adaptation?
- What is the adaptation? What is it used for?
- What inventions do you use?
- Think of a famous human inventor! What did s/he invent?
- Write a report comparing an animal or plant adaptation with a human invention!

Nearly everything people have invented mirrors something in the world of Mother Nature, yet until recent times our inventions have been arrived at independently, or almost wholly independently, of our natural counterparts. Only within the past few decades has the natural world been more fully appreciated, with the result that there is now a greater tendency to look to the animal and plant kingdoms for ideas, or to improve on human inventions already in existence. Even so, all too often, we cannot fully appreciate the natural “invention” until something very like it has been invented by people independently.

CHICAGO REGION INTERPRETERS

Assembly programs featuring live animals, storytelling, and audience participation.
Teach the Mind Touch the Heart, It's a Jungle Out There-Substance Abuse,
It's a Jungle Out There-Animals Only, Earthkeepers-Native American Legends,
Earth Day Every Day, It's Going to Sting Me, Down on the Farm, Dinosaur Discoveries,
Fun for Little Ones, Haunted Halloween Happenings

Christine Buik (630) 968-3209 or www.cricketshows.com Jim Walser

ADAPATIONS COMPARED WITH INVENTIONS

CORN SNAKE

Skin Color

- Helps snake hide & survive

Jaws that unhook

- Opens to swallow food bigger than head

BEAVER

Teeth

- Cuts down trees to use for food and shelter

Webbed Feet

- Makes beaver a better swimmer

Tail

- Steers beaver in water

BOX TURTLE

Shell

- Protects body from danger

Hinge (unique to box turtles)

- Closes bottom shell up tightly

Helmet (Bicycle, Army, Construction)

WHITETAILED DEER

Antlers (also Animal Horns)

- Protection from enemies
- Challenge other deer for mate

Muscles

- Spring like action to avoid danger by jumping fences, stream, etc.

Tail

- Waving tail up and down warns other deer of danger

BARN OWL/BIRDS

Feathers, No outer ears

Hollow bones, No heavy teeth

- All of the above help birds to fly

BURDOCK PLANT

Seed Head

- Hook type burrs stick to animal fur or clothes to move or “hitchhike”

INVENTIONS...

Camouflage Mask & Cloth

- Helps people hide while hunting or in wartime

Channel Locks (Plumber Pliers)

- Opens to hold small or big pipes

INVENTIONS...

Hatchet, Axe or Chain Saw

- Cuts down trees for use by people

Swimming Fins

- Helps people swim better

Boat Rudder

- Steers boat in water

INVENTIONS...

- Protects head from dangers

Hinge for Door or Window

- Helps keeps doors and windows closed tightly

INVENTIONS...

Bayonets, Knives & Daggers

- Protection from enemies

Pogo Stick

- Spring like action for fun!

Yellow Signal Flag

- Waving yellow flag at racetrack or road construction site means watch out

INVENTIONS...

Gliders, Airplanes

Jets, Helicopters

- All of the above allow people to fly

INVENTION...

Velcro

- Hooks and loops stick together to easily fasten shoes, pants, coats, etc.

COMPARE AN ANIMAL OR PLANT ADAPTATION OF YOUR OWN WITH AN INVENTION!

C.R.I.CKET PRESENTS LIVE ANIMALS IN EDUCATIONAL, ENTERTAINING PROGRAMS
(630) 968-3209 or www.cricketshows.com