

Albuquerque Aquarium
Rio Grande Botanic Garden
**Information &
Activity Packet**

Grades 2-5

Albuquerque Biological Park
EDUCATION

*Group Leaders: Please feel free to copy the information
and activities for your entire group.*

2601 Central NW * Albuquerque, NM 87104 * (505) 764-6200



ALBUQUERQUE BIOLOGICAL PARK

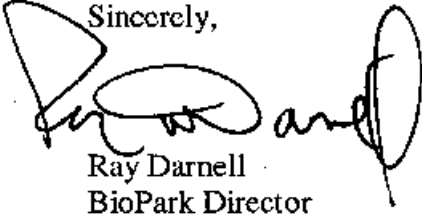
Dear Teacher:

Thank you for your interest in the Albuquerque BioPark's Rio Grande Zoo, Albuquerque Aquarium and Rio Grande Botanic Garden as educational resources.

We welcome your visit and want to help you make the most of our facilities. Enclosed you will find educational materials that you are free to copy and distribute to your students for their use while you are on the grounds. If you have questions or would like additional information on other resources in BioPark Education, please call either Zoo Education at 764-6214 or Aquarium/Botanic Garden Education at 848-7180. If you have any other questions regarding your trip, please call the Reservation Clerk at 764-6200.

Again, thank you for your interest in the City of Albuquerque's BioPark.

Sincerely,



Ray Darnell
BioPark Director



Bill V. Aragon
BioPark Education Curator



CHAPERONE GUIDE

On behalf of the staff at the Albuquerque BioPark's Rio Grande Botanic Garden and Albuquerque Aquarium, thank you for your support during your child's field trip. Please abide by all the instructions given to you by your child's teacher.

Some specific pointers to enhance your visit to the aquarium and botanic garden:

If you are allowed to take a small group independently of the whole class, get to know the children's names. Make sure they know who you are and understand that they must stay with you at all times. Children learn best when they are in a safe environment, and they will feel most safe if you, the adult in charge, stay with them. It is very important that the children respect each other, the adults in their group, the other visitors to the aquarium and botanic garden and of course the animals and plants during the visit. Remind them to treat the animals and plants with the same respect they like to have.

Students are generally very excited on field trips. They often have a tendency to move too fast, and the result is they miss lots of interesting things. Try to slow them down through the exhibits. Focus their energy by asking them observation questions about the animals and plants they see. Get them to sit down quietly and watch animals in the aquarium when possible. Explain that many animals need to be camouflaged in their environment and encourage them to try to find as many animals as possible in all exhibits. The botanic garden is also a great place to sit down and make observations. Have students look for as many different plants as possible and watch for pollinators, like bees and butterflies, visiting flowers in the garden.

Some questions to stimulate thinking and discussion:



Aquarium:

What would it be like for this fish in the ocean? What kind of food do you think this animal eats in the wild? How does this fish find its food?

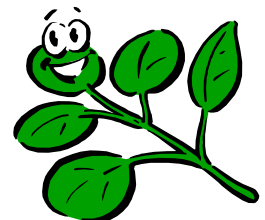
Garden:

How does this plant get its water, sunlight and air? What does this plant do to survive in the wild? How might animals depend on this plant?

Safety of students and animals and plants

Please make sure that the students know that we ask that no one tap on the glass in the aquarium. It is very loud for the fish inside the tanks! It is important that no one put their hands in the water of the Shallows and Shores exhibit. Tell your group that this is the animals' only home and they need to feel safe here. Children love to climb; however, there are places at the aquarium and garden where climbing can be dangerous. In the garden, students must remain on the paths. The flowers are here for all visitors to enjoy; and they can be touched and smelled, but not picked. Remind the students that they need to be aware of how their behavior affects each other, the animals and the other visitors.

Leaving the aquarium and botanic garden with a souvenir can extend the child's experience, but remember that gift shop visits by school groups must be supervised. The Albuquerque Aquarium and Rio Grande Botanic Garden are great places to learn. Thank you for helping make your group's experience a great one!



BIOPARK GROUP ADMISSION INFORMATION

GROUP REQUIREMENTS

A chaperone ratio of 1 adult for every 5 students is required. Your group will be charged according to the total number you arrive with, not the number your reservation was made for. Reservations are only scheduled Monday through Friday.

GROUPS MUST ENTER AS A GROUP

In order to qualify for discount admission, your group must be processed in one transaction. Individual payments will not be accepted at this reduced admission rate. Late arrivals will be required to pay full price admission. Your group will be admitted based on the count on your receipt. Do not pay for members that are arriving late. Remember to wait for your bus driver if he/she wishes to visit with your group.

Chaperones are responsible for group behavior. Please assign a chaperone to a specific group of children. Unsupervised and misbehaving children and their groups will be escorted from the grounds by security, and the school principal will be notified. Please attach an identifying nametag to each student. On it, include the student's name, the teacher's name, and the school name. (For animal safety, please do not use pins.)

RESERVED GROUP ADMISSION

HOURS OF OPERATION: 9:00am to 5:00pm

Rio Grande Zoo

Adults **\$3.00**

Students **\$1.50**

Albuquerque Aquarium/Rio Grande Botanic Gardens

Adults **\$3.00**

Students **\$1.50**

REGULAR ADMISSION

Seniors (Age 65 and over) **\$3.00**

Adults (13-64) **\$7.00**

Children (3-12) **\$3.00**

Children age 2 and under **FREE**

The BioPark accepts cash, check, Visa, MasterCard, and purchase orders.

RESERVATION AGENT: (505) 764-6272

**THIS DOES NOT CONSTITUTE A CONFIRMED RESERVATION.
THIS IS FOR INFORMATION PURPOSES ONLY.**

2005 SCHOOL LUNCH ORDER FORM

Zoo Aquarium-Garden

School Name: _____

School Address: _____

Contact Person: _____

Phone Number: _____

Date of Order: _____

Meal Date: _____

Serving Time: _____

Total # of Guests: _____

| Lunch #1 - \$3.50/person | Lunch #2 - \$3.95/person | Lunch #3 - \$4.25/person |
|---|---|--|
| <p>Choice of One: Fried Chicken Drumstick or Mini Corn Dog or Grilled Cheese Sandwich or Beef Taco</p> <p>Includes: Lays Potato Chips & Small Pepsi Drink</p> <p># of Orders: _____</p> <p>Total \$ Amount: _____</p> | <p>All Beef Hot Dog Lays Potato Chips Small Pepsi Drink</p> <p># of Orders: _____</p> <p>Total \$ Amount: _____</p> | <p>¼ lb. Hamburger Lays Potato Chips Small Pepsi Drink</p> <p># of Orders: _____</p> <p>Total \$ Amount: _____</p> |

Method of Payment:

Cash

Check

Credit Card

Save yourself and your students time, money and effort by pre-ordering school lunches. School lunches must be ordered at least one week prior to your visit to the Zoo, Aquarium or Botanic Garden. Please call (505) 848-7123 to place your order. If paying with a check, please make it payable to **SERVICE SYSTEMS ASSOCIATES**. PLEASE FAX BACK TO (505) 848-7192.



ALBUQUERQUE AQUARIUM EDUCATIONAL ACTIVITIES



The Albuquerque Aquarium is home to approximately 3,000 aquatic animals from a variety of salt and freshwater habitats. The aquarium's theme follows a drop of water as it travels from the headwaters of the Rio Grande in Colorado to the Atlantic Ocean. A nine-minute film, "One River, Many Voices," introduces visitors to this journey. The aquarium offers a wonderful setting to teach about conservation and stewardship. By actually seeing a shark swim by, touching a crab, hearing the waves lapping the shore or smelling the mud flats, you experience the diversity of life. For teachers, the aquarium offers a chance to learn and teach in a non-traditional setting. The aquarium is a stimulating educational resource, with applications for many disciplines.

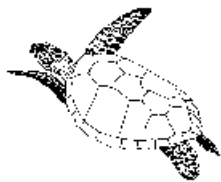
The following activities may be used during your visit to the Albuquerque Aquarium with your elementary school students.

HABITAT HUNT

The aquarium makes every effort to display animals in a natural setting to help visitors visualize the animal in its native habitat. A habitat is an animal's home. It provides an animal with food, water, and shelter. Some habitats in the aquarium are the coral reef, salt marsh, and river. Match each aquatic animal with its habitat.

DIFFERENT IS GOOD

An adaptation is a change in a body structure or behavior that better enables a plant or animal to survive in its habitat. An example might be the streamlined shell of a sea turtle. By observing the aquatic animals, students will be able to match the animal to its adaptation.



AQUARIUM SEARCH AQUARIUM TRIVIA

While visiting the aquarium, students can complete their search or trivia page. Older students will find the answers by reading (or having a chaperone read) the interpretive panels by the exhibits. (The exhibits are listed in italics on the worksheet.) The younger students can circle the aquarium animals they find during their visit.

TURTLE QUEST

Sea turtles are reptiles that have adapted to spending their entire life at sea. Only the females come ashore to lay eggs. Sea turtles have a shell that is streamlined and flippers for swimming. Many sea turtles are endangered. Some of the problems sea turtles face include: natural predators, boats, drift nets, nesting habitat destruction caused by shore line development, poachers and pollution. The Turtle Quest maze is designed to give students an idea of the dangers that sea turtle hatchlings face.



HABITAT HUNT

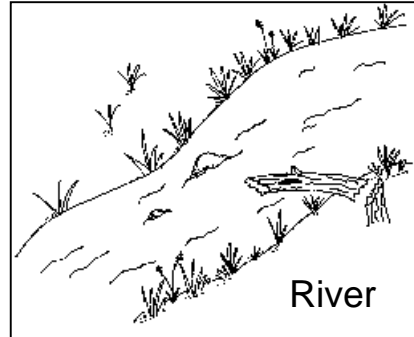
Match the animals with their habitat.

1.

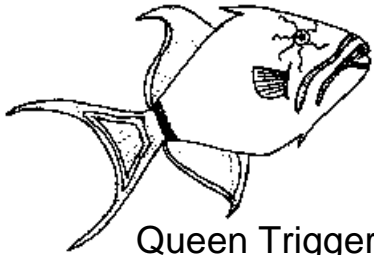


Moon Jelly

A.



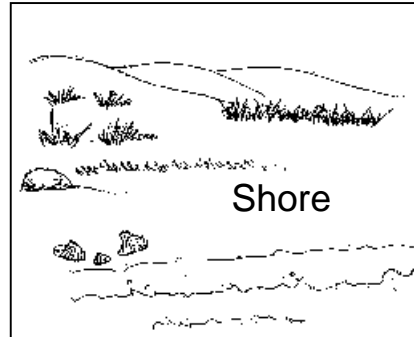
River



2.

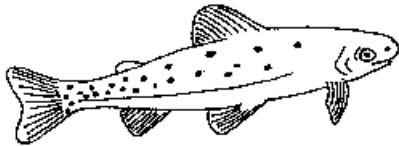
Queen Triggerfish

B.



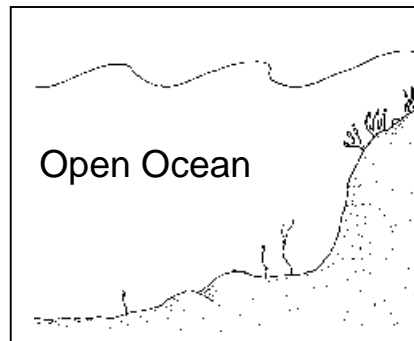
Shore

3.



Cutthroat Trout

C.



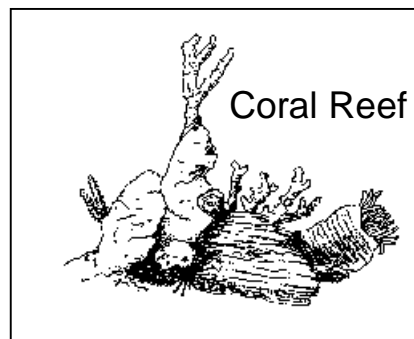
Open Ocean

4.



Brown Pelican

D.



Coral Reef



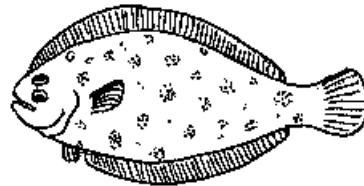
DIFFERENT IS GOOD

Observe the listed aquatic animals.



Aquatic Animals

- A. Sea turtle
- B. Porcupinefish
- C. Moray eel
- D. Hermit crab
- E. Short bigeye
- F. Flounder
- G. Lookdown
- H. Angelfish
- I. Shark



Adaptations

Choose the best matched adaptation/animal pair.

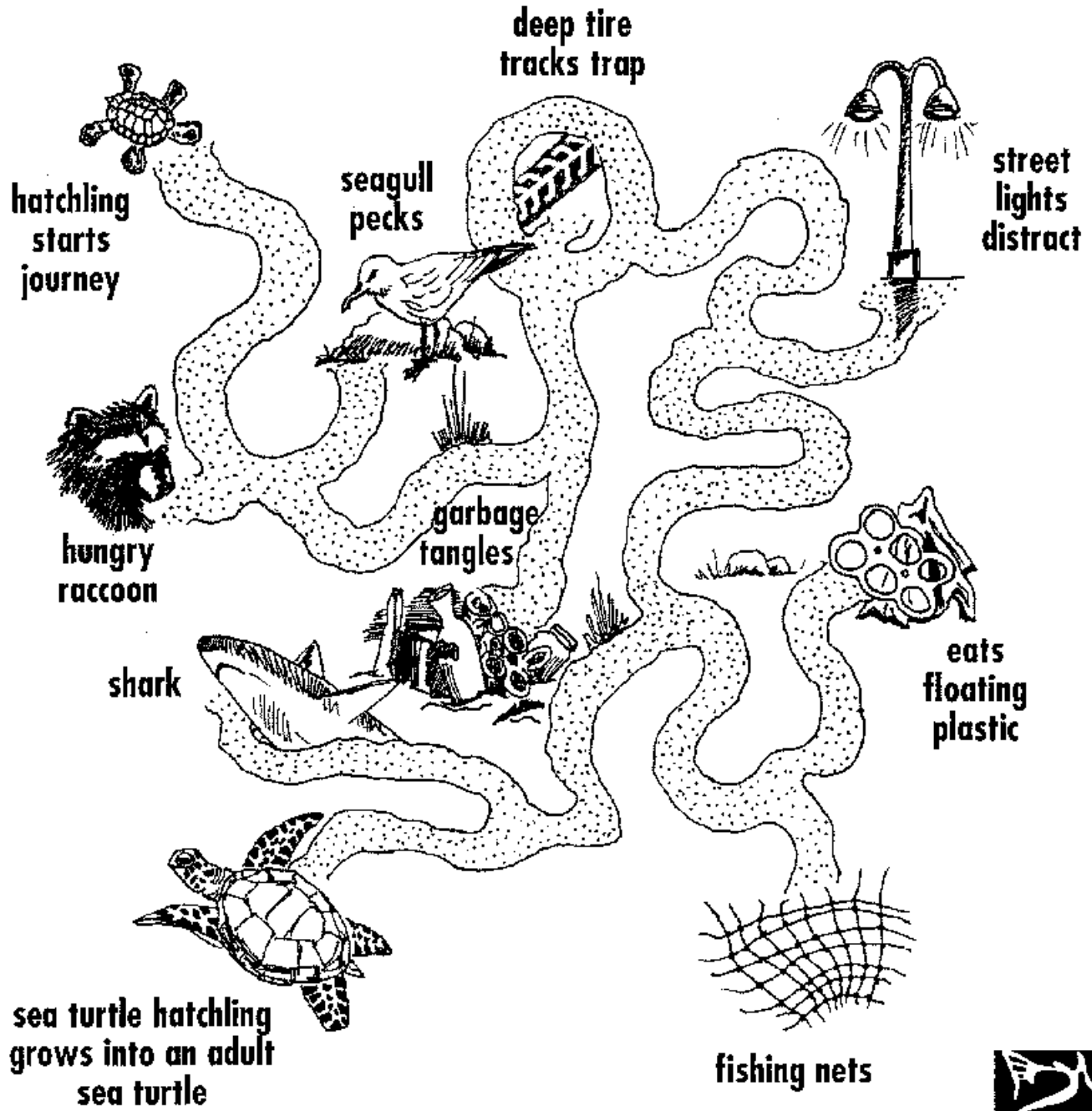
1. ____ **claws:** used for protection and catching food.
2. ____ **silver color:** blends in with shimmery light from the water's surface.
3. ____ **large eyes:** enable better sight in dark hiding places.
4. ____ **teeth:** predatory fish have sharp teeth for catching prey.
5. ____ **spines:** protect slow swimming fish from predators.
6. ____ **bright color combinations:** advertise for mates; camouflage in colorful habitats, disrupt body outlines to confuse predators.
7. ____ **flattened body:** easily hidden along the bottom.
8. ____ **flippers:** propel animal through the water (better than legs!)
9. ____ **ribbon-shaped body:** easily hides in narrow crevices or holes.





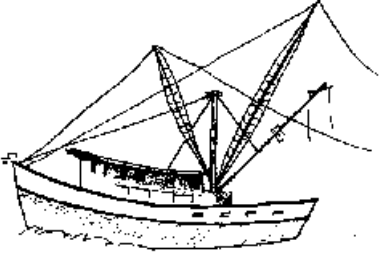

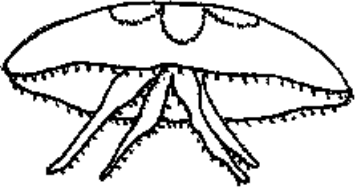
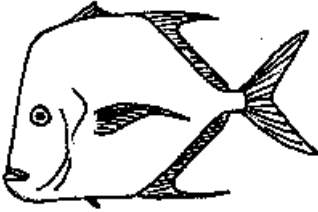

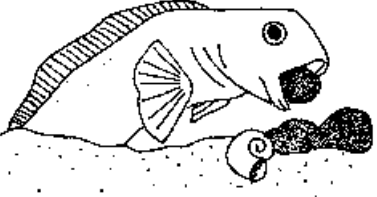

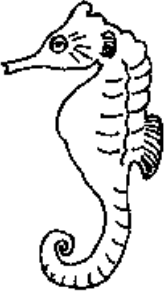
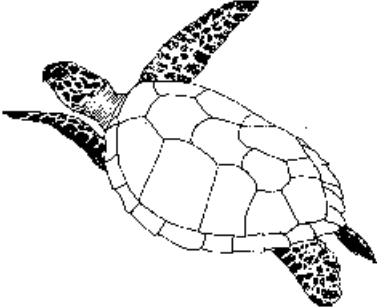
TURTLE QUEST

Sea turtles face many obstacles during their lives. Only 1 in 10,000 survive to adulthood. Can you help the sea turtle hatchling make it safely to adulthood?



AQUARIUM SEARCH

Circle each thing you find.
If you know the name, write it in.

| | | |
|--|--|--|
|  _____ |  _____ |  _____ |
|  _____ |  _____ |  _____ |
|  _____ |  _____ |  _____ |



Abasco Biological Park
EDUCATION

AQUARIUM TRIVIA

Read the interpretive panels to find the answers.
Use the numbered letters to complete the message.

1. After hundreds of years of human settlement, the _____ is a changed river. (*Rio Grande Today*)
2

2. Only 1 in 10,000 sea _____ hatchlings survives to adulthood. (*Gulf Past*)

3. Jetties provide _____ for many rocky shore organisms formerly absent from the western Gulf of Mexico.
9
1 (*Jetty*)

4. The boat, the Candy M, was used to catch _____ in the Gulf of Mexico.
10
(*Shrimp Boat*)

5. Rays, skates and sharks are cartilaginous fishes that lack the rigid skeleton of _____ fish. (*Shallows and Shores*)
11

6. The Flower Garden Banks do not have flowers, but they do have brightly colored _____.
3
(*Coral Reef*)

7. The green moray eel is a _____, not a snake. (*Eel cave*)
5

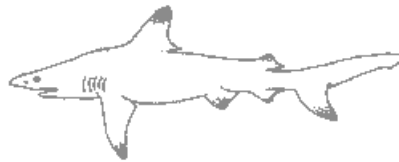
8. A jelly's body is over 95% _____. (*Jellies*)
7

9. The _____ was wrecked off of Padre Island long ago and is now home to many fish. (*Inside the Wreck*)
8 4

10. Sharks range in size from six-inch long dwarf sharks to 50-foot-long _____ sharks.
6
(*Ocean*)

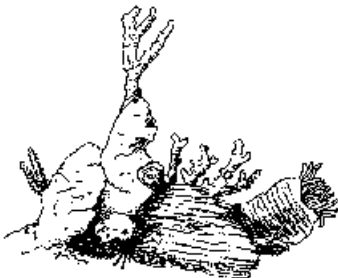


MESSAGE:



____ A K ____ ____ A R ____ O ____ T ____
1 2 3 4 5 6 7

W ____ T E ____ ____ L A ____ E T !
8 9 10 11



ANSWERS: Rio Grande, turtle, habitat, shrimp, bony, coral, fish, water, San Esteban, whale
MESSAGE: Take care of the water planet.



RIO GRANDE BOTANIC GARDEN EDUCATIONAL ACTIVITIES



The Rio Grande Botanic Garden is home to approximately 11,000 plants from a variety of habitats. The glass conservatories showcase plants of North American Deserts and Mediterranean climates. There are also formal gardens that include a Spanish Moorish garden, the Jardin Redondo and the Ceremonial Rose garden. The Heritage Farm is opened year round. The Butterfly Pavilion is open May-September.

The botanic garden offers a wonderful setting to teach about biodiversity. By actually seeing a tall saguaro cactus, a flitting butterfly or the lily pads in the pond; by hearing the waterfall; smelling the lavender and roses; or feeling the dry desert earth, you experience the diversity of life. For teachers, the botanic garden offers a chance to learn and teach in a non-traditional setting. The botanic garden is a stimulating educational resource, with applications for many disciplines.

The following activities may be used during your visit to the Rio Grande Botanic Garden with your elementary school students.

HABITAT HUNT

The botanic garden makes every effort to display plants in a natural setting to help visitors visualize the plant in its natural habitat. A habitat is a plant's home. It provides a plant with food, water, space to grow and shelter for protection if needed. What are some of the habitats of some New Mexico plants? (Example: cottonwood – bosque.)

GARDEN SEARCH GARDEN TRIVIA

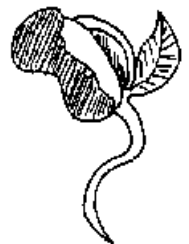
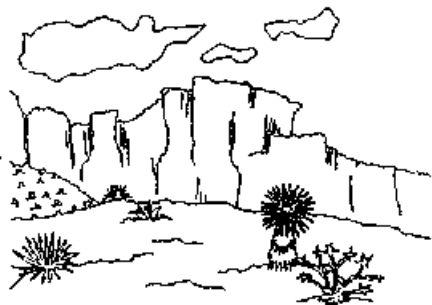
While visiting the botanic garden, students can complete their search or trivia page. Older students will find the answers by reading (or having the chaperone read) the interpretive panels near the exhibits. The younger students can circle the plants or garden objects they find during the visit.

GET TO KNOW A PLANT!

Sometimes, the best way to admire the beauty and uniqueness of a plant is to sit down and take a long look. This activity encourages visitors to slow down and make scientific observations. Have students choose any plant to observe, being careful to stay on the path. Please, don't pick the flowers!

GROWING CONCERNS

A plant's growth and survival may be inhibited by many factors during its life cycle such as: flood, fire, soil composition, seed dispersal, habitat loss, pests and disease. The Growing Concerns maze is designed to give students an idea of the obstacles that plants must overcome while growing from seeds into mature plants. Will the seeds survive and grow?





Alberta
Biological
Park
EDUCATION

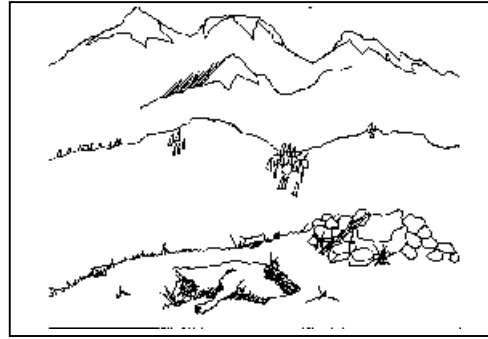
HABITAT HUNT

Match the plants with their habitats.

1.



A.



MOUNTAINS

2.



B.

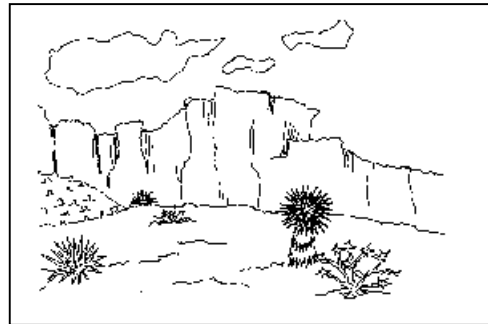


POND

3.

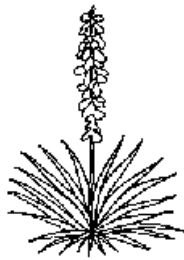


C.

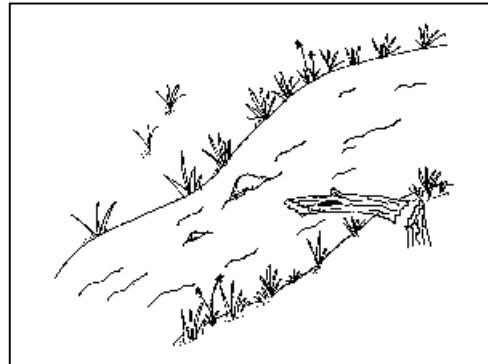


DESERT

4.



D.



BOSQUE

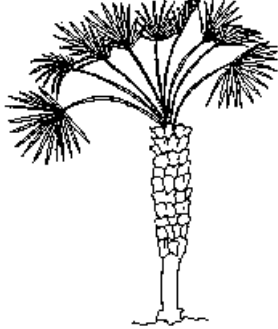

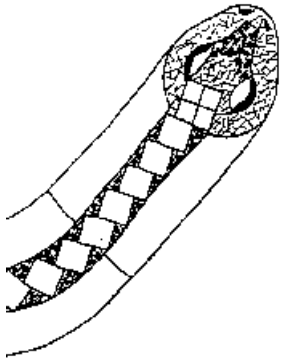






ANSWERS: 1B, 2A, 3D, 4C



Albuquerque
Biological
Park
EDUCATION

BOTANIC GARDEN SEARCH

Circle each garden item you find.
If you know the name, write it in.

| | | |
|--|---|--|
|  _____ |  _____ |  _____ |
|  _____ |  _____ |  _____ |
|  _____ |  _____ |  _____ |



BOTANIC GARDEN TRIVIA

Read the interpretive panels to find the answers.
Use the numbered letters to complete the message.

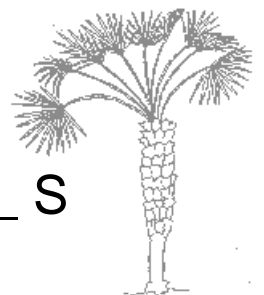


- Another name for the Sonoran Desert is the _____ desert.
17 3
- The Chihuahuan Desert is the _____ desert in North America.
10 16 11
- Storms from the Gulf of Mexico bring _____ rainfall to the Chihuahuan Desert.
12 1 8
- The boojum is an odd-looking plant that can be found growing in the _____ peninsula.
18
- Playas are dry _____.
9
- Mediterranean climates generally have long, _____ and dry summers.
13
- In southern California, the Mediterranean habitats are called:
_____.
6 19
- Olive branches are a symbol of _____.
20 5
- Some _____ trees in Spain are 1,000 years old.
7 15
- Mediterranean climates have rainy _____ growing seasons.
14 4 2



MESSAGE:

_ E D I _ E R _ A _ E _ N
 1 2 3 4 5
 _ _ I _ A T _ S _ A _ E _ D _ _ E R _ S
 6 7 8 9 10 11 12 13
 _ A _ T I N _ _ O H _ _ _ E N .
 14 15 16 17 18 19 20



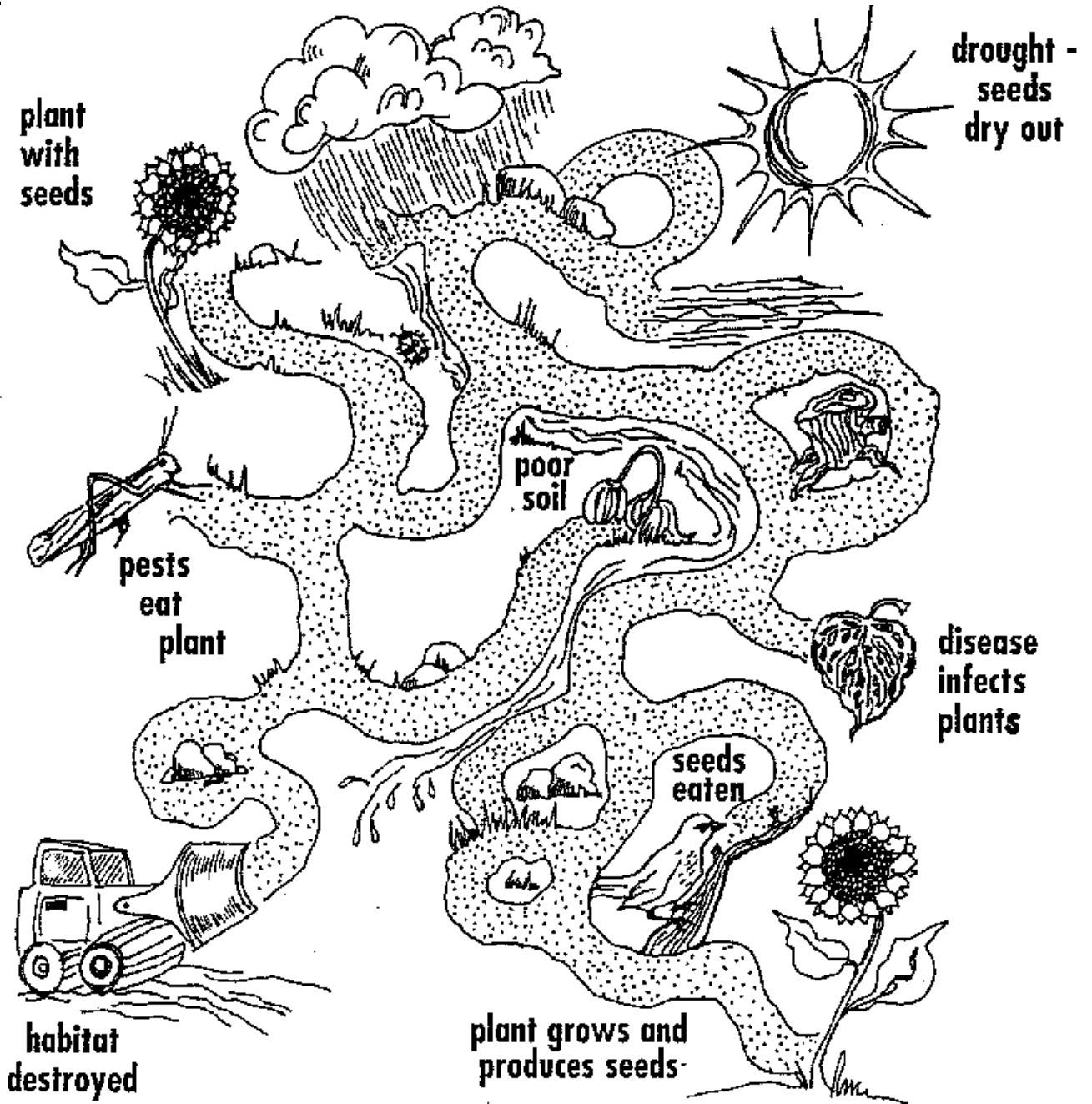
ANSWERS: tree, largest, summer, Baja, lakes, hot, chaparral, peace, olive, winter.
MESSAGE: Mediterranean climates are deserts waiting to happen.



Albuquerque
Biological
Park
EDUCATION

GROWING CONCERNS

Many obstacles prevent seeds from growing into full grown plants. Can you help the seed grow into a plant by escaping the problems along the way?



Rio Grande
Botanic Garden



Please help us to improve our education activities. Your comments are important to us! Please take a moment to fill out the evaluation below and mail it to:

Aquarium/Botanic Garden Education
2601 Central Ave NW
Albuquerque, NM 87104

(You may also deliver this to the education building the day of your visit.)

Please check each activity you used:

BOTANIC GARDEN

- Habitat Hunt
- Botanic Garden Search
- Trivia
- Get to know a plant!
- Growing Concerns

AQUARIUM

- Habitat Hunt
- Aquarium Search
- Trivia
- Different is Good
- Turtle Quest

What grade do you teach? _____

Which activities did you find most effective? Why?

Which activities did you find least effective? Why?

What could be included in the packet to further enhance your next visit?

Any additional comments:

Thank you!

(Optional)

Name: _____ Phone #: _____