Sting Ray Hand Puppet

Background information:

Rays are very similar to sharks. They have similar body features, except in a flattened body shape. Most rays are bottom feeders and therefore have their mouths located on the bottom. Their teeth are similar to human molars and are used to crush and grind food. Their nostrils and gill slits are also on the bottom. Their eyes, however are on the top, allowing them to see what is above them, but being useless for finding food underneath them. The stingrays rarely use their stingers, which lie flat on their tails and are only raised when they feel threatened.

For more information on rays, I suggest searching the web. A good place to start is the Wikipedia, the free online encyclopedia. You can get nice pictures by using the image search on Google. Just enter your keyword, then click on the word IMAGES above the keyword box.

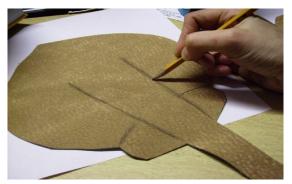
You will need:

- A copy of the pattern page
- A piece of non-fraying fabric in a color and texture you think looks like a ray—tan or beige is ideal. (You may want to check out the upholstery section as well as the fabric?) Each ray requires about 9" x 18" but if you are doing multiply rays, you can save fabric by putting the rays opposite ways on the fabric. You can get as many as 8 rays out of a half yard of 45" fabric.
- White felt or other light-colored non-fraying fabric (9"x9" per ray) You could also use the ray body fabric, if it is light-colored on one side.
- Two little white craft "pom-poms" (1/2" diameter) for each ray (for the eyeballs) (If you happen to have 3/4" size lying around and want to substitute with these, they will work also.)
- Fabric glue that dries flexible
- Clear tape
- Scissors
- Pencil (with nice, new eraser on end)
- Permanent marker or fabric marker to draw the underside features of the ray on the white felt. (You could also use the pencil to do this if you want to simplify the materials required.)
- Acrylic paint (I recommend bright blue to make a blue-spotted ray, but there are many types of rays, some with brown or black or white spots)
- Either a dab of black acrylic paint, or two small black felt circles—to be used for the ray's pupils on the pom-pom eyes

NOTE: If it is a bonus for you to include some simple sewing, you might want to sew around the outside of the ray, instead of using fabric glue, However, you will still need the fabric glue for attaching the eyes and the stinger.

Instructions:

- 1) Cut out the pattern pieces and use clear tape to piece together the ray's tail, matching A/A and B/B.
- 2) Lay the pattern pieces on the sting ray fabric and cut out one body piece, two eye pieces, and one stinger piece. (You may want to trace around the pattern before cutting.)
- 3) Use the pencil to make shaded lines on the topside of the ray's body, like this:



- 4) Now lay the body pattern onto the white felt and trace out another body shape, but only down to where the dotted line is on the pattern, where the squiggly line stops. This white felt piece will be the underside of the ray. The dotted line represents not only the bottom of the white felt piece, but also the opening where you will put your hand into the puppet (from the bottom).
- 5) Draw the underside features on the white underside piece, using a fabric marker, or pencil. The pattern piece has a picture of what to draw. (The ray also has electrical sensor around the mouth, but these are microscopic and cannot be seen.)



- 6) Glue the white underside piece to the bottom of the main body piece along the edge indicated by the squiggly line. (This is the step that you could do with the sewing machine if you want to teach simple sewing skills as a part of the project.) Make sure NOT to glue across the dotted line. This is where your hand will go in.
- 7) While body piece is lying flat to dry, you can finish the top of the ray. Glue the stinger on the tail where indicated by the dashed lines on the pattern piece.



- 8) Glue on the half-moon eyelid pieces where indicated by the dashed lines on the pattern. Try to leave somewhat of an opening on the straight side, so that the eyeball will go in easily. If your time requirements make it necessary, you could also insert the eyeball at this time, but you will have to keep pressing down around the edges of the eyelid, making sure the eyeball doesn't pop it off.
- 9) Painting: Use the eraser end of the pencil as your paintbrush. Dip the eraser into the acrylic paint, then press the eraser to the fabric to make a dot. This is almost more like printing than painting. Cover body with spots. The acrylic paint will dry quickly and will not smear after dry. You may want to speed drying process by provided a fan or hairdryer. This cut the drying time by half or more.
- 10) The eyeball: put some glue inside the eyeball "pocket" and insert the fuzzy white pom-pom. Press down on the eyelid to flatten the pom-pom a bit. You may need to re-press the edges of the eyelid.



- 11) Put a black paint spot (or glue on a small black felt circle) on the white pom-pom.
- 12) Let your project dry. For best results, let project dry thoroughly before putting your hand into it. If you have used glue for the seam around the edge, you don't want it to pop open.

Suggested follow-up activities using the hand puppets:

- Play the aquarium music from "The Carnival of the Animals" by Saint-Saens and have the students make their rays "swim" around the room, according to the mood suggested by the music. You could also other music, too. You could provide a variety of selections and have the students make their rays move differently for each one.
- Play "touch tank" by having some of the student be the rays in a touch tank in an aquarium, and the other be the visiting humans around the edge of the tank. The rays swim around in the tank occasionally coming to the edge where humans can touch them. Real rules at touch tanks include using only two fingers to touch them, and not touching their eyes or tails. Real rays feel soft and rubbery, and very slippery.
- You could have the rays pretend to find and eat food from the sea floor, showing how they are bottom feeders. During this time you could remind the students how the ray uses not only its nostrils to find food, but also its electrical sensors, located around its mouth. Sharks have these electrical sensors, also. You could give lots of information about rays just conversationally, as you interact with the students. (Of course, you will need to have done your homework ahead of time, and know about rays!)

