



# COLOR THEORY



1. What do colors symbolize in the Bible?

Judges 8:26 — Purple garments \_\_\_\_\_

Jeremiah 17:8 — Green \_\_\_\_\_

Isaiah 1:18 — Scarlet, red, and crimson \_\_\_\_\_

Isaiah 1:18 — White as snow and wool \_\_\_\_\_

Daniel 7:9 — White clothing and hair \_\_\_\_\_

Luke 11:36 — Darkness and light \_\_\_\_\_

1 Peter 2:9 — Here again darkness and light are contrasted. If you have been called into the light, what does this verse say you should do? \_\_\_\_\_

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2. What colors do you think would be good for decorating in church during these seasons, and why?

Easter \_\_\_\_\_

Pentecost \_\_\_\_\_

Advent \_\_\_\_\_

Christmas \_\_\_\_\_

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3. List the three primary colors. Use crayon or colored pencil to place them in the appropriate wedges of the color wheel and provide a definition of a primary color.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

Definition of a primary color: \_\_\_\_\_

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4. List the three secondary colors. Use crayon or colored pencil to place them in the appropriate wedges of the color wheel and provide a definition of a secondary color.

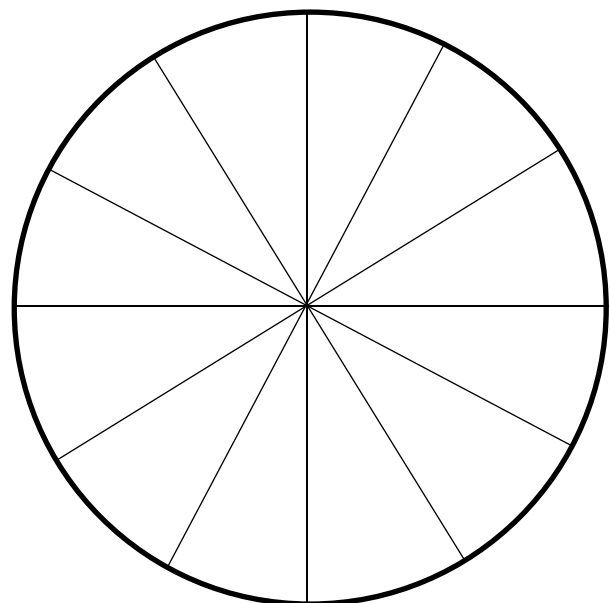
a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

Definition of a secondary color: \_\_\_\_\_

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5. List the six tertiary colors. Use crayon or colored pencil to place them in the appropriate wedges of the color wheel and provide a definition of a tertiary color.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_
- f. \_\_\_\_\_

Definition of a tertiary color: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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6. Provide the definition of complementary colors and point out to your counselor two colors on the color wheel that are complementary.

Definition of complementary colors: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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7. Provide the definition of analogous colors and point out to your counselor two colors on the color wheel that are analogous.

Definition of analogous colors: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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8. Provide the definition of a cool color, warm color, earth color, and local color. Point out to your counselor these colors on the color wheel.

Cool color: \_\_\_\_\_

\_\_\_\_\_

Warm color: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Earth color: \_\_\_\_\_

\_\_\_\_\_

Local color: \_\_\_\_\_

\_\_\_\_\_

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9. With a set of acrylic paints that has only five colors — the three primary colors, plus black and white — and three pieces of white poster board (minimum of 8" x 10" [20 x 25 cm]), complete the following three art projects. Explain to your counselor how you created the colors you used in your pictures and why you chose to use those colors.

- a. Paint a picture of two cars or trucks using only one primary color, white, and black. The cars or trucks must be the same size, but one must be darker or duller than the other. Explain to your counselor the difference between “tinting” and “toning” in your picture. Explain to your counselor how the lightness or brightness of an object affects the “depth” of the picture.
- b. Paint a picture of any subject you choose, but you must use colors that you think would make the people who see the picture feel “relaxed” and “peaceful.” Explain to your counselor why you chose those colors and whether the placement of certain colors (which colors were next to other colors) made a difference on how someone might feel about the picture.
- c. Paint another picture of any subject you want, but you must use colors that you think will make the people who look at your picture feel “excited.” Explain to your counselor why you chose those colors and whether the color placement (which colors were next to other colors) made a difference on how someone might feel about the picture.

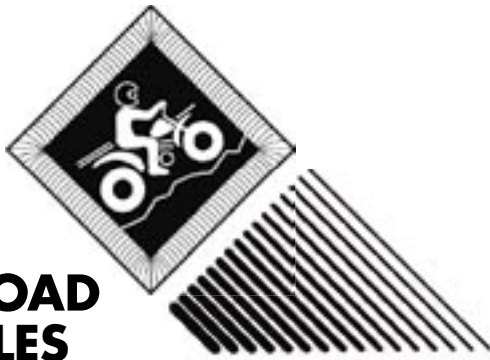
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# OFF-ROAD VEHICLES



Earning this merit badge will demonstrate that you have certain knowledge and skills concerning off-road motorcycles, all-terrain vehicles, and/or quads. Each state and province has different rules regarding license and public trails. It is your responsibility to know and obey local regulations.

1. Learn and obey the following **off-road vehicle rules**. Explain to your counselor why each is important.
  - Always respect God’s creation and the private property of others.
  - Always ride with adult supervision.
  - Know your riding skill, abilities, and limitations, and always ride within your abilities.
  - Always wear an approved helmet when riding.
  - Wear protective clothing, appropriate for the weather conditions.
  - Bring plenty of water if you ride in any desert conditions.
  - Inspect your equipment before each trip.
  - When trail riding, always stay on the trail.
  - Never take a passenger on a vehicle designed for a single rider.

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2. List at least four items of common and appropriate ORV apparel and tell why each is important.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_

- d. \_\_\_\_\_

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3. What should you do if you become lost or injured while riding off-road? \_\_\_\_\_

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4. Demonstrate to your counselor the following pre-start safety check.
  - a. Check that the fuel tank is full, and bring along spare fuel.
  - b. Check the oil.
  - c. Check the tires for proper air pressure, damage, and excess wear.
  - d. Check the chain for lubrication and tension.
  - e. Check all cables: clutch, throttle, and brake.

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5. Name four reasons that people use ORVs.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_

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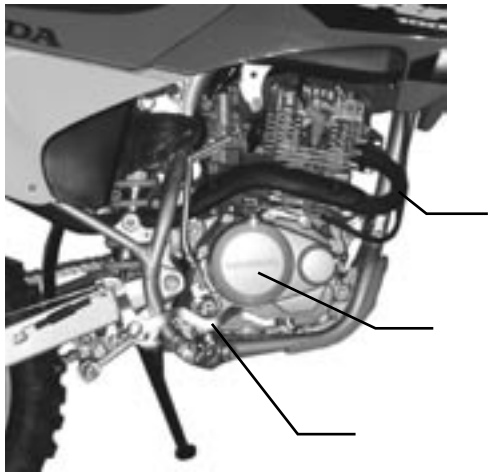
6. Label the parts of the two ORVs, using the lists and pictures for each on the next page.

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7. Locate the following components on your ORV and show them to your counselor.

a. fuel tank	i. rear sprocket
b. throttle	j. crank case
c. front brake hand lever	k. exhaust pipe
d. rear suspension	l. muffler
e. cylinder head	m. starter (kick/switch)
f. front brake	n. rear brake pedal
g. choke	o. spark plug
h. chain	p. clutch

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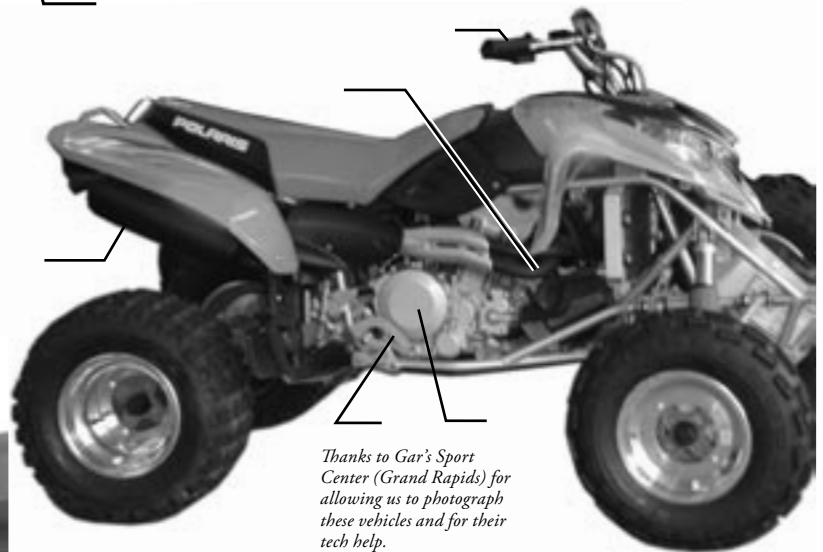
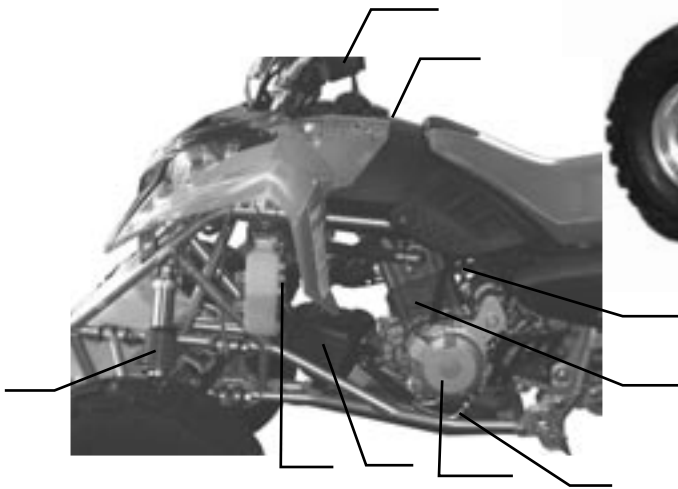
### Motorcycle

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|----------------------|---------------------|
| a. chain             | g. fuel tank        |
| b. crank case        | h. muffler          |
| c. cylinder head     | i. rear brake pedal |
| d. exhaust pipe      | j. rear sprocket    |
| e. front brake       | k. rear suspension  |
| f. front brake lever | l. throttle         |



### Quad

- |                     |                  |
|---------------------|------------------|
| a. case saver       | h. fuel shut off |
| b. clutch lever     | i. fuel tank     |
| c. crank case       | j. head          |
| d. exhaust pipe     | k. oil radiator  |
| e. rear brake pedal | l. oil tank      |
| f. front shocks     | m. shifter       |
| g. muffler          | n. throttle      |



*Thanks to Gar's Sport Center (Grand Rapids) for allowing us to photograph these vehicles and for their tech help.*

8. Do a little research online or in the library. What are some ways that careless ORV riders harm the environment? Why is attention to environmental impact so important?

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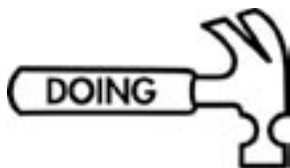
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1. Interview an ORV rider. Ask the following questions and write the rider's replies in the spaces provided.

Name of rider: \_\_\_\_\_

What do you like about off-road riding? \_\_\_\_\_

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Have you ever been seriously injured while off-road riding? If yes, tell about your injury experience.

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What are the best ways to prevent injuries? \_\_\_\_\_

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Where are the best legal places to go off-road riding in the area? Are these places public or private?

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2. Plan and conduct an off-road riding trip.
  - a. Make a list of all your needed supplies, including food, water, fuel, and safety equipment. Show this list to your counselor.
  - b. Decide on a riding location. Make sure you are obeying all local ordinances.
    - If this is a public place, check out fees and other rules.
    - If this is a private place, be sure you have the owner's permission.
  - c. Before you begin your ride, go through the pre-start safety check (No. 4 under Learning).
  - d. Determine your return time and let someone know of your plans ... where you will be and how long you'll be gone.
  - e. Give instructions in the event of your late return. If possible, exchange cell phone numbers.
  - f. Ride for at least 30 minutes.
  - g. When you return, clean all your equipment and return supplies to their proper place.

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