



Turtle Troubles Follow-Up Activity Ideas



Many activities and lesson plans about turtles can be found online. This program provides an introduction to the problem of plastic pollution in the ocean and inspires students to take action to help turtles. These actions could be included as a student-driven sustainable practice in a Green School application.

1. Outdoor Connections:

- a. Have students survey the schoolyard to count the total number of pieces of trash that they find (remember to check trees for wind-blown bags). Categorize the trash as plastic / non-plastic. Students can consider questions such as: What percentage of trash is plastic? What is the source of the trash? Where are storm drains at the school? Where will trash that washes into the storm drain go? Where is the closest stream? Which river does it flow into? Where does the river go? Students can collect data using a brand audit form:
https://www.breakfreefromplastic.org/wp-content/uploads/2018/08/BFFP_Brand_Audit_Form-Aug-2018-1.pdf
- b. Consider stenciling storm water drains with messages or painting designs to remind people that any litter they drop ends up in the ocean.
- c. Students can track plastic trash with apps such as NOAA's marine debris tracker:
<https://marinedebris.noaa.gov/partnerships/marine-debris-tracker>

2. STEM activities:

STEM challenges: students can brainstorm and design solutions to some of the problems that turtles face such as;

- Safe ways for turtles to cross roads
- Alternatives to releasing balloons at graduations and other events
- A replacement for plastic drinking straws
- Tools for removing plastic from the ocean or preventing it from entering (such as Mr. Trash Wheel in Baltimore City)
- Cleaning up an oil spill

Ideas can also be found at PBS Design Squad such as designing a safe holder for 6 soda cans <http://pbskids.org/designsquad/build/harmless-holder/>

3. Science Connections

- a. Classes can follow the migration of leatherback and other sea turtles on the Sea Turtle Conservancy web site. Some of the turtles such as 'Lincoln' visit the coast of Maryland <https://conserveturtles.org/sea-turtle-tracking-active-sea-turtles/>
- b. Activities on turtle migration can be found here:
<http://www.tourdeturtles.org/teachers.php>

- c. Have students draw a food web for a bog turtle or leatherback turtle.
- d. Have students describe the internal and external adaptations of turtles that help them survive.
- e. Learn more about bog turtles: <https://www.marylandzoo.org/animal/bog-turtle/>

4. Writing & Art Connections

- a. Have students research other species of turtles and the threats that they face.
- b. Have students write a persuasive letter. Write to local politicians about the problems turtles face and actions that could be taken. Write letters to local stores that sell helium balloons asking them to provide information about the dangers of releasing balloons outdoors. More information about and suggestions to remedy the problems caused by balloons can be found at <https://balloonsblow.org/alternatives/>
- c. Have students design a poster for NOAA's annual marine debris program art contest.



5. Math connections:

- a. Whether a sea turtle egg hatches into a male or female turtle depends on the temperature the egg was incubated at. Students can calculate the different ratios of male to females that will hatch at different temperatures (exercise in Sea Turtle Journey).

Other lesson ideas about turtles can be found on websites such as:

<http://seaturtleexploration.com/teacher-resources/lesson-plans/>
<https://conserveturtles.org/wp-content/uploads/ElementarySchoolLesson-SeaTurtles-STC-CPayne.pdf>

More information about the issue of plastic pollution in the ocean including resources for teachers can be found on the NOAA website: <https://marinedebris.noaa.gov/resources>.

Take action: have students monitor how many plastic bags or straws they use in a week and then try to reduce the total.

Lesson ideas on plastic pollution:

- Pennsylvania Sea Grant: <https://seagrant.psu.edu/sites/default/files/Lessons%20for%20NIE%20%20and%203%205GyresALLACTIVITIESPlasticPollutionCurriculum.pdf>
- The Plastic Pollution Coalition: <https://plasticpollutioncoalition.zendesk.com/hc/en-us/articles/224373087-General-resources-for-all-grades>



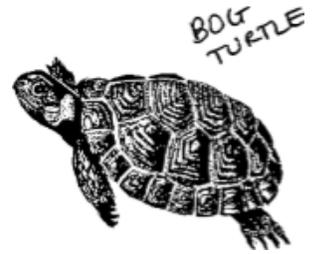
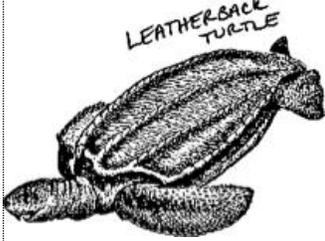
Larry Hogan, Governor

February 2019

Wildlife and Heritage Service
 580 Taylor Ave, E-1
 Annapolis, MD 21401
dnr.maryland.gov/wildlife



Jeannie Haddaway-Riccio, Secretary



Compare and Contrast Sea Turtles and Land Turtles

Think about the life cycle, appearance, habitat, diet and adaptations of leatherback and bog turtles.

Ways Sea Turtles and Land Turtles are ALIKE	Ways Sea Turtles and Land Turtles are DIFFERENT

If you got the chance to be a leatherback turtle or a bog turtle for a day which would you choose and why? _____



Larry Hogan, Governor

February 2019
Wildlife and Heritage Service
580 Taylor Ave, E-1
Annapolis, MD 21401
dnr.maryland.gov/wildlife



Jeannie Haddaway-Riccio, Secretary