



The Days of Creation Through a 21st Century Lens

How to Use these Lessons

Overview

Over the past few years, schools around the country have focused on STEM and subsequently STEAM education. Jewish supplementary schools have caught this wave bringing science and technology into the classrooms, often using technology as a tool for learning and science as a lens into achievements of Israel. Art, or perhaps arts and crafts, have long been part of the supplemental school classroom, thus our decision to focus on STEM instead of STEAM. Science, technology (outside of computers and tablets for video and research), engineering, and math are rarely found in this setting, often confined to gematria or discussions about the ten plagues or the splitting of the Sea of Reeds.

This curriculum brings STEM education to the center of the Jewish classroom. Each unit features a project or experiment which brings out themes in the Torah text giving students a deeper understanding of the written word and/or a concrete connection to their daily lives.

Projects and Experiments:

The projects and experiments were chosen not only for their connection to the Torah portion but also for their ease of use. In general, they use materials found at home or school, or which are easily accessible. If you can follow directions, such as those in a recipe, you should be able to oversee these projects and experiments with ease.

In the case of some experiments and projects, there are many examples available online. Where possible we have included one clear demonstration video should you want to see the suggested activities. We **strongly recommend** that you try doing all projects and experiments in advance.

In some cases, each student will have their own materials, in some they will be part of small or large groups. When thinking about room setup and group size, try to maximize the number of students who can participate and make sure that all students are able to see.

Optional: We have not suggested any safety equipment as the experiments use common household items. Use lab coats, safety goggles, and gloves both as a protective measure and to create the mood of serious scientific inquiry.

Hebrew Text

The corresponding Torah text for each day of creation has been provided in a separate download. The English has been edited to be gender neutral. Feel free to use any text and translation that meets your needs. The lesson assumes that the class will read and discuss the verses before any scientific inquiry. It is the JTeach.org custom to include Hebrew where possible. We understand that some younger students may not be able to read Hebrew; we feel there is value in students seeing it as the language of our sacred texts.

Other appropriate Jewish texts, such as the final *havdalah* blessing, have been provided where necessary. We have not included any Midrashic or Talmudic texts as the intended audience is 2nd - 4th



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graders. If you would like to do the experiments/projects with older children, you might consider adding text or asking more complex questions about the Torah verses given.

Review

It is expected that, after the first day of creation, you will begin the remaining lessons in the series with a review of what was created in the preceding days. We suggest using previous experiments/projects or the materials used as visual cues.

A Few Words about God

As the lessons are geared toward the younger primary grades, the assumption regarding the text is that God is the creator. Young children are natural theologians and philosophers. They may ask questions based on their knowledge of theology or science. We have addressed some possible questions but cannot anticipate everything that might come from the mind of a 6-to-9-year-old. (If we could, we might be in a different line of work!) We encourage you to become familiar with the worldview of your congregation and to answer questions accordingly. For instance, you might suggest that God and people are partners in creation or that the Torah leaves room to believe in both creation and evolution. We have included a few tips in the lessons where appropriate, but understand that no one knows your students, or your community, better than you.



The First Day of Creation

Overview

There are two different scientific activities to help students explore the first day of creation. In the first activity, students will watch a short video about black holes and compare what they have learned to what they have read and discussed about **תהו ובהו** (*tohu vavohu*), “unformed and void,” which appears in Genesis 1:2. In the second activity students will place water, which they have colored, and oil in a plastic bottle, shake it and let it settle to mimic the idea of the separation of light and darkness in Genesis 1:4.

Objectives

Students will:

- Study and discuss a Torah text, Genesis 1:1-5, focusing on the first day of creation.
- Learn how black holes are comparable to *tohu vavohu*
- Create a “lava lamp” to serve as a reminder of the first day of creation
- Investigate why oil and water don’t mix
- Observe the effect of Alka Seltzer on oil and water
- Optional: Connect creation to the *Yotzer Or* prayer

Materials Needed

- Copies of text:
 - Genesis 1:1 – 5 (available as a separate download). Feel free to use the text and translation of your choice
 - *Yotzer Or* from the prayer book of your choice
- A device on which to watch a short video
- Water bottles
- Oil
 - Mineral oil, such as found in baby oil, works best; but a light-colored vegetable oil will work as well.
 - You will need enough oil to fill each bottle halfway.
- A coloring agent. Dark colors are strongly recommended. There are several options; each will be explained in the directions below.
 - Food coloring
 - Powder paint—if using, you will also need spoons
 - Old markers—if using, you will also need paper or plastic cups
- Table covers
- Large bowls for discarding excess water
- Funnels
- Optional: Alka Seltzer tablets

Prepare in Advance

- Preview this short video on black holes:
<https://www.youtube.com/watch?v=kOEDG3j1bjs>



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- Purchase or collect supplies
- Make copies
- Cover tables
- Place bowls for collecting water on tables
- Open large containers such as oil or powder paint

Description of Activities

This scientific inquiry is meant to enhance the study of the story of creation, specifically the first day. There are two options for when you might have students engage in the scientific material related to the Torah:

- After the students have read all five verses about the first day of creation
- As the students get to the appropriate verse

Genesis 1:2

Ask students to imagine what they think **תהו ובהו** or “unformed and void” might look like.

Invite students to gather around a screen and show them this National Geographic short film on black holes: <https://www.youtube.com/watch?v=kOEDG3j1bjs> This video may be somewhat advanced for younger students. Let them know that there may be some big words, but you think they will be able to understand the main points.

After they have watched the film, ask: What do you think black holes and **תהו ובהו** have in common? Possible answers might include:

- They both involve something beyond our understanding
- They both contain a lot of matter

You might share: The Hebrew word “*bohu*” can be interpreted to be **בו הוא** “all is in it.” The gravitational pull of black holes is so strong that everything that comes near their orbit is pulled in.

Genesis 1:4

Read Genesis 1:3 – 5 and ask:

- What happened in these verses?
- What did God create?

Note: Some students may assert their understanding of the calendar, the solar system, or the Big Bang. You might respond by:

- Acknowledging their scientific knowledge
- Expressing that an understanding of science does not preclude a belief in God
- Make room for students who have differing beliefs about God

This experiment using oil and water is meant to illustrate the separation of light and darkness.



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Directions

1. Give each student a sealed full water bottle, approximately 20 ounces.
2. Instruct students to open the water bottles and pour out approximately two-thirds of the water.
3. Color the water:
 - If using food coloring: students can drip 3-4 drops directly into the remaining water in the bottle, replace the cap and shake the contents gently until the color saturation is achieved.
 - If using paint: students should pour the water into a bowl and mix in paint one spoonful at a time until a dark color is achieved. Students can pour colored water back into bottles using a funnel.
 - If using markers: Students should pour the water into a bowl and dip a marker into it, waiting until the color bleeds from the marker into the water. Students can pour colored water back into bottles using a funnel.
4. After the water has been colored and is back in the bottle, using funnels, students should fill the remainder of the bottle with oil, leaving about an inch at the top.
5. Instruct students to replace the cap and tighten it.
6. Instruct students to shake the bottles vigorously for thirty seconds and observe what happens.
7. Instruct students to place the bottles on the tables and let them rest for thirty seconds.

Ask:

- What happened when you poured the oil into the bottle with the water?
- What happened when you shook the bottle?
- What happened when you let the bottle rest?
- How does this remind you of what we just read about the first day of creation?

How it works:

- Oil floats on top of water because it has a lower density.
- Water molecules are polar and are attracted to one another. Oil is non-polar.
- Water molecules are more attracted to other water molecules than they are to oil molecules.

Optional: Before students cap their bottles, give each student one or two Alka Seltzer tablets and instruct them to drop them gently into their bottles. This will cause a “lava lamp” effect and could be used to demonstrate Genesis 1:2: “darkness over the surface of the deep and a wind from God sweeping over the water...”

Remind students that even when it seems that there is darkness where there should be light (a rainstorm during the day or an eclipse for instance), light and darkness are eventually separated again.

Optional: Look at the *Yotzer Or* prayer from the *Shacharit* service. The text varies between denominations and prayer books; please use the version that fits with your worldview.



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Point students to the verse which begins: - מַה־רַּבּוּ מַעֲשֵׂיךָ יְיָ (Mah rabu ma'asecha YHVH.) This verse, which comes from the book of Psalms (104:24) reads: מַה־רַּבּוּ מַעֲשֵׂיךָ יְיָ כָּל־כֹּחַ בְּחָכְמָה עָשִׂיתָ מְלֶאכֶה הָאָרֶץ קִנְיָנְךָ and translates as follows: "How great are Your works, YHVH! In wisdom you made them all, filling the earth with your creatures."

Let students know that the first part of the verse talks about how amazing the natural world is. Remind them how awesome it is that light contains all colors and, depending on your vantage point and the atmospheric conditions, you can see all of them at different times.

Ask: What other things that occur in nature do you find amazing? Some examples include:

- Plain looking caterpillars turning into beautiful butterflies.
- Birds that can imitate any sound they hear
- Worms and sea stars that can regenerate parts of their bodies
- There are mountains in the ocean
- The light from stars can take hundreds or even thousands of years before it is visible on earth.

Genesis 1:1-5	בראשית א:א-ה
¹ When God began to create heaven and earth...	אֲבִרָאשִׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ:
² the earth being unformed and void, with darkness over the surface of the deep and a wind from God sweeping over the water—	בְּהָאָרֶץ הָיְתָה תִּהוּ וְבָהוּ וְחֹשֶׁךְ עַל־פְּנֵי תְהוֹם וְרוּחַ אֱלֹהִים מְרַחֶפֶת עַל־פְּנֵי הַמַּיִם:
³ God said, "Let there be light"; and there was light.	וַיֹּאמֶר אֱלֹהִים יְהי אוֹר וַיְהי־אוֹר:
⁴ God saw that the light was good, and God separated the light from the darkness	וַיִּרְא אֱלֹהִים אֶת־הָאוֹר כִּי־טוֹב וַיַּבְדֵּל אֱלֹהִים בֵּין הָאוֹר וּבֵין הַחֹשֶׁךְ:
⁵ God called the light Day, and the darkness God called Night. And there was evening and there was morning, a first day	וַיִּקְרָא אֱלֹהִים לְאוֹר יוֹם וּלְחֹשֶׁךְ קִרְא לַיְלָה וַיְהי־עֶרֶב וַיְהי־בֹקֶר יוֹם אֶחָד:



Second Day of Creation

Overview

The second day of creation focuses on splitting the lower waters from the upper waters and the creation of heaven. Students will investigate if the sky is made of water, how light moves through water, and why the sky appears to be blue. The first part of the lesson is comprised of reading and discussion; the second uses flashlights shining through a water source from different angles and requires a darkened room.

Objectives

Students will:

- Study and discuss Genesis 1:6-8, focusing on the second day of creation
- Use the second day of creation to explore how the appearance of the sky is like that of water
- Explore how light moves through water
- Investigate why the sky is blue

Materials Needed

- Copies of text
 - Genesis 1:6-8 (available as a separate download). Feel free to use the text and translation of your choice.
- Small glass aquarium (2-5 gallons), or a clear plastic storage bin at least six inches in height
- Water (in gallon jugs or pitchers)
- Milk
- Spoons
- Flashlight and extra batteries
- Table covers
- Optional: A white index card or piece of heavy paper to reflect the light

Prepare in Advance

- Make copies
- Cover tables
- Test flashlight batteries
- If you are not normally in a space where the room can get dark, plan to do this experiment in a place that is easily darkened
- Find out if there is anyone who is afraid of the dark and plan for their comfort during the experiment

Description of Activities

Remind students what was created on the first day. Hand out copies of Genesis 1:6 – 8. Read the text together as a class. Ask: What happened on the second day? What was created? You may note that God separated the waters, but it is not clear that God created anything new.

Let students know that a very small percentage of the atmosphere, or what we see as the sky, is comprised of water. The atmosphere is made up mostly of two gases: nitrogen (78%), and oxygen



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(21%), as well as trace amounts of several different elements. About 71% of the earth's surface is covered in water; above the earth's surface is atmosphere. In this case, what's written in the Torah corresponds with what we know about earth science. Why do you think the Torah refers to the sky as "upper waters?" Is it possible to interpret this to mean that the sky is made of water? Why or why not? If you didn't know what the sky was made up of, what would you think or guess?

Tell students that one reason people could believe that the sky is made up of water is because, like the water in a lot of earth's rivers, lakes, and oceans, it appears blue.

Let students know that you will be doing an experiment to investigate why the sky appears to be blue.

Directions

1. Place the empty tank in the middle of a small table (students should be able to stand close to both one side and one end).
2. Invite students to pour water into the tank or container until it is 2/3 full.
3. Instruct students to put a small amount of milk into the tank and stir it. The water should look slightly cloudy. If it doesn't seem cloudy, add more milk slowly.
4. Gather students around the table, some along the length of the tank, some at the end.
5. Place the flashlight on the short end of the tank and shine it through the length of the tank, asking students to make observations. Students should see light with an orange cast.
6. Pass the flashlight to students standing along the length of the tank and shine it through from the front to the back of the tank. Students should see light with a blue cast.
7. Instruct students to switch places, so that those who were viewing from the end are viewing from the side and vice versa.
8. Optional: Instruct a student to hold a piece of white paper or index card at one end of the tank. Invite students to observe what they see on the card.

Ask: What color did the light appear when viewed from the side and when viewed from the end?

- If the experiment works as it should, students viewing from the front or back of the tank should see a slightly blue cast to the water, students looking from the end (or the light reflected onto a piece of white paper) should see either the water or paper with an orange cast.

Ask: What color is the light from the sun?

- The most common answer is usually clear or white, or perhaps yellow. In truth, though the light is called white, it is made up of all the colors of the rainbow.
- Light travels in waves. The red light on one end of the rainbow travels in longer waves, the blue light on the other end of the rainbow travels in shorter waves. (Optional: Illustrate this by drawing wavy or bumpy lines. The blue line should have shorter bumps or waves which are closer together; the red line should have longer, softer waves). An image can be found here: <https://www.sciencelearn.org.nz/images/37-the-visible-spectrum>



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- The sky looks blue because the gases in the atmosphere scatter the blue light more than the other colors as it travels in shorter waves. The sunset appears red because, when the sun is low in the sky, the sunlight must pass through more atmosphere before you can see it. When this occurs, the blue light is scattered so much it cannot be seen as well, which allows the red and orange light to be seen more easily.

Genesis 1:6-8	בראשית א:ו-ח
⁶ God said, "Let there be an expanse in the midst of the water, that it may separate water from water."	וַיֹּאמֶר אֱלֹהִים יְהִי רָקִיעַ בְּתוֹךְ הַמַּיִם וַיְהִי מַבְדִּיל בֵּין מַיִם לַמַּיִם
⁷ God made the expanse, and it separated the water which was below the expanse from the water which was above the expanse. And it was so.	וַיַּעַשׂ אֱלֹהִים אֶת־הָרָקִיעַ וַיַּבְדֵּל בֵּין הַמַּיִם אֲשֶׁר מִתַּחַת לָרָקִיעַ וּבֵין הַמַּיִם אֲשֶׁר מֵעַל לָרָקִיעַ וַיְהִי־כֵן:
⁸ And God called the expanse Heaven. So the evening and the morning were the second day.	וַיִּקְרָא אֱלֹהִים לָרָקִיעַ שָׁמַיִם וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר יוֹם שֵׁנִי:



Third Day of Creation

Overview

On the third day of creation plant life is brought into existence. In this lesson, students will learn about how a plant grows from seed and what it needs to grow. They'll use their knowledge, creativity, and tablets or computers to create stop-motion animation simulating plant growth.

Objectives

Students will:

- Engage with a Torah text, Genesis 1:11-13, about the third day of creation
- Connect the Torah's version of the creation of vegetation to what plants need to grow
- Watch a time-lapse video of a plant growing from a seed
- Demonstrate their understanding of plant growth through the creation of stop motion animation

Materials Needed

- Copies of handouts
 - Genesis 1:11-13 (available as a separate download). Feel free to use the text and translation of your choice.
- Materials to make stop-motion animation: clay, play dough, pipe cleaners, construction paper, Legos, mini-figurines, etc.
- Devices for watching videos

Prepare in Advance

- Preview videos
 - Plant Stop Motion Animation <https://youtu.be/vkgEyreiP8w>
 - Bean plant time-lapse <https://youtu.be/w77zPAAtVTul>
- Make copies
- Purchase or gather materials for stop motion animation
- Familiarize yourself with stop motion animation. Here are a few helpful videos
 - <https://www.youtube.com/watch?v=ppedXZHhE0&vl=en>
 - <https://www.youtube.com/watch?v=4aHta3gpFgg>
 - <https://www.youtube.com/watch?v=td2DgP56DP0>
- Familiarize yourself with a stop-motion animation app, such as Stop Motion Studio (available for free for iOS and Android).

Description of Activities

Review what was created on the first two days, using visual cues from the first few STEM projects.

Read the verses from Genesis 1:11-13 (available for download as a separate document.) Ask:

- What did God create on the third day?
- Can you name a "seed-bearing plant" or a "fruit with the seed in it."



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Gather students together and show them the time-lapse video of a bean plant sprouting.

Ask: What does a plant need to grow?

- Simply put, plants need food, light, and water in order to grow. Plants growing outside get nutrients from the soil and water from dew, rain, and/or water that exists in the soil.
- You might mention that outdoor plants usually depend on the sun for light. On the third day of creation, light exists, as do water and soil, but the sun has not yet been created; this happens on the 4th day.

Let students know that they will be making their own stop motion animation of the third day of creation using materials such as pipe cleaners, Legos, crayons and paper, or whatever else you have gathered or expanded upon from the list above. It can be anything having to do with seeds, planting, and growth. Give students materials and access to devices for recording. Encourage students to use their creativity. If it is too difficult for students to both create and film, you might ask student aides to assist with the filming.

Optional: Before they begin, show the stop motion video included above as an example.

If time permits, show the videos that the students created. If there isn't time, consider sending links home in a weekly newsletter or showing them at an assembly in the future.

Genesis 1:11-13	בראשית א:יא-יג
¹¹ And God said, "Let the earth sprout vegetation: seed-bearing plants, fruit trees of every kind on earth that bear fruit with the seed in it." And it was so.	י"א וַיֹּאמֶר אֱלֹהִים תִּדְשָׂא הָאָרֶץ דָּשָׂא עֹשֶׂב מִזֵּרִיעַ זֶרַע עֵץ פֶּרִי עֹשֶׂה פֶּרִי לְמִינֹו אֲשֶׁר זֶרְעוֹבוּ עַל־הָאָרֶץ וַיְהִי־כֵן:
¹² The earth brought forth vegetation: seed-bearing plants of every kind, and trees of every kind bearing fruit with the seed in it. And God saw that this was good.	י"ב וַתּוֹצֵא הָאָרֶץ דָּשָׂא עֹשֶׂב מִזֵּרִיעַ זֶרַע לְמִינֵהוּ וָעֵץ עֹשֶׂה־פֶּרִי אֲשֶׁר זֶרְעוֹבוּ לְמִינֵהוּ וַיֵּרָא אֱלֹהִים כִּי־טוֹב:
¹³ And there was evening and there was morning, a third day.	י"ג וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר יוֹם שְׁלִישִׁי:



Fourth Day of Creation

Overview

Jumping off from the creation of celestial objects, students will perform experiments in two different areas: orbit and gravity. Students will replicate the earth's orbit around the sun first using their bodies, then using a pie plate and aluminum roasting pan and a small ball. They will then watch the force of gravity in action through two experiments: one with water, the other with balls of different sizes and weights.

Objectives

Students will:

- Engage with a Torah text, Genesis 1:14-19, about the fourth day of creation
- Relate the creation of celestial bodies on the fourth day of creation to the scientific concepts of orbit and gravity.
- Learn about orbit and gravity
- Replicate one object orbiting another on a small scale
- Observe gravitational pull on different objects

Materials Needed

- Copies of handout
 - Genesis 1:14-19 (available as a separate download). Feel free to use the text and translation of your choice.
- Pie tin
- Oval roasting pan
- Two one-to-two-inch circles cut out of construction paper, one blue one yellow
- Masking tape
- Several balls of different weights and sizes such as: ping pong ball, tennis ball, baseball, basketball, soccer ball
- Paper cups
- A pitcher of water
- A large basin
- Plastic table cover or tarp

Prepare in Advance

- Copy handout
- Cover table or floor with plastic
- Tape a three- or four-foot diameter circle on the floor with a dot in the middle

Description of Activities

Review what was created on the first three days, using visual cues from the first few STEM projects.

Read the verses from Genesis 1:14-19 (available for download as a separate document). Ask:

- What did God create on the fourth day?
- What does “greater light” and “lesser light” mean? Can you figure it out from context clues?



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Orbit

Ask: Does anyone know what the word orbit means? Fill in any gaps in information by letting students know that an orbit is the path of one object in space as it revolves around another object.

Let students know that the earth orbits around the sun and the moon orbits around the earth.

Solicit two volunteers to demonstrate an orbit. Instruct one of the students to stand on the dot in the middle of the circle you have taped onto the floor. Instruct the other student to walk around the first student in a circle. When two circles have been completed, stop the orbiting student and have both students sit down in their places.

Ask: Is this what it looks like when the earth orbits the sun or the moon orbits earth? Fill in any gaps in information, by letting students know that as the earth and the moon orbit, they also rotate. The earth rotates a little more than 365 times each year; it takes the moon about twenty-seven days to rotate on its axis. If necessary, explain that rotating is like spinning.

Instruct the students who were playing the parts of the earth and the moon to stand up. Ask the student playing the part of the orbiting celestial body to spin as he or she walks around the circle. Ask:

- How dizzy do you think the sun and the moon feel based on how quickly they rotate on their respective axes?

Tell students that you are going to demonstrate this in a different way.

Hold up an empty pie plate and ask a student to tape a yellow circle in the middle, representing the sun. Ask another student to place a marble or ping pong ball (blue if possible), representing the earth, in the pan and swirl it around so that the ball both rotates on its axis and orbits the sun.

Ask: Does this look similar to or different from the earth orbiting the sun? Why?

Let students know that the earth and the moon orbit in more of an elliptical pattern. Demonstrate this using an oval roasting pan. Solicit a student to tape a blue circle in the middle of the pan, representing the earth. Solicit another student to place a marble or ping pong ball, representing the moon, in the pan and swirl it around so that the ball both rotates and spins on its axis as it orbits the earth.

Gravity

Now that students understand orbit, you will introduce them to gravity.



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According to NASA: “**Gravity** is the force by which a planet or other body draws objects toward its center. The force of **gravity** keeps all of the planets in orbit around the sun.”

<https://spaceplace.nasa.gov/what-is-gravity/en/>

Below, you will find two experiments which demonstrate the idea of gravity. It is unlikely that you will have time to do both experiments. Choose the one you think your students will find most engaging.

Option 1: Ball Drop

Choose two students and give each one a ball which differs in weight and size from the other one. Instruct students to hold the balls in their hands an equal distance from the ground. (You may have to help them with this part.) Instruct them to drop the balls when you reach “three.” Before counting, ask students to develop a hypothesis of what they think will happen.

Count to three and have students drop the balls. If the experiment is done correctly – they both hold the balls at the same height and let go of them at the same time – they should hit the ground at the same time. Repeat the experiment a few more times using a different combination of balls each time.

Let students know that the gravitational force exerted on each is the same regardless of weight and size.

Option 2: The Hole in the Cup

Hold up two paper cups. Using a pen, poke a hole in the bottom of one cup.

Tell the students that you are about to pour water in each cup. Ask them to form a hypothesis as to what will happen.

Solicit a student to hold both cups about two feet over a basin. Fill both with water. Ask students to observe the results.

Let students know that the force of gravity pulled the water into the basin through the hole. The water in the cup without the hole remained in the cup as it had no way out, the bottom of the cup was a force against gravity. In addition, the person holding it was working against gravity by holding it in their hand.

Refill the cup with the hole, asking a student to hold their finger over the bottom as you do so. Instruct the student to hold the cup two feet over the basin and, at your signal, remove their finger from the hole and drop the cup straight down. Instruct the other students to observe.



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If the experiment is done correctly, the water should not flow out of the cup once the cup has started dropping as both the water and the cup are being pulled toward the ground by gravity at the same rate. Once the cup hits the basin, the water will come out. You may have to try this more than once as it may be difficult for students to drop the cup straight down, without inadvertently tipping it.

Genesis 1:14-19	בראשית א:יד-יט
¹⁴ God said, "Let there be lights in the expanse of the sky to separate day from night; they shall serve as signs for the set times—the days and the years;	י' וַיֹּאמֶר אֱלֹהִים יְהִי מְאֹרֶת בְּרָקִיעַ הַשָּׁמַיִם לְהַבְדִּיל בֵּין הַיּוֹם וּבֵין הַלַּיְלָה וְהָיוּ לְאֹתוֹת וּלְמוֹעֲדִים וּלְיָמִים וּשְׁנִים:
¹⁵ and they serve as lights in the expanse of the sky to shine upon the earth." And it was so.	ט' וְהָיוּ לְמְאֹרֶת בְּרָקִיעַ הַשָּׁמַיִם לְהָאִיר עַל־ הָאָרֶץ וַיְהִי־כֵן
¹⁶ God made the two great lights, the greater light to dominate the day and the lesser light to dominate the night, and the stars.	ט' וַיַּעַשׂ אֱלֹהִים אֶת־שְׁנֵי הַמְּאֹרֶת הַגְּדֹלִים אֶת־ הַמְּאֹרֶת הַגָּדֹל לְמִשְׁלַת הַיּוֹם וְאֶת־הַמְּאֹרֶת הַקָּטָן לְמִשְׁלַת הַלַּיְלָה וְאֵת הַכּוֹכָבִים:
¹⁷ And God set them in the expanse of the sky to shine upon the earth,	י' וַיִּתֵּן אֹתָם אֱלֹהִים בְּרָקִיעַ הַשָּׁמַיִם לְהָאִיר עַל־ הָאָרֶץ:
¹⁸ to dominate the day and the night, and to separate light from darkness. And God saw that this was good.	י' וְלִמְשָׁל בַּיּוֹם וּבַלַּיְלָה וּלְהַבְדִּיל בֵּין הָאֹר וּבֵין הַחֹשֶׁךְ וַיֵּרָא אֱלֹהִים כִּי־טוֹב:
¹⁹ And there was evening and there was morning, a fourth day.	יט וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר יוֹם רְבִיעִי:



Fifth Day of Creation

Objectives

Students will:

- Engage with a Torah text, Genesis 1:20-23, about the fifth day of creation
- Learn tips for protecting or assisting migrating birds and spawning fish through the lens of the fifth day of creation
- Watch a video about bird migration
- Create origami birds and fish as a reminder to protect or assist birds and fish

Materials Needed

- Handouts:
 - Genesis 1:20-23
 - 5 Ways to Help Birds/Fish Resource (on cardstock and cut apart)
- A computer and projection system for watching a video
- Origami paper in different colors
- Optional: Markers or googly eyes and glue-sticks for embellishing origami animals.
- Ribbon
- Cardstock
- Hole punch
- Scissors

Prepare in Advance

- Preview this video about bird migration: https://www.youtube.com/watch?v=Q-mMMpl_T8Q
- Practice making origami birds or fish. Tutorials can be found here:
 - Birds:
 - <https://www.origamiway.com/easy-origami-bird.shtml>
 - <https://www.thesprucecrafts.com/easy-origami-swan-tutorial-2540975>
 - <https://www.youtube.com/watch?v=QpwezRCO0d8>
 - <https://www.youtube.com/watch?v=9gni1t1k1uY>
 - Fish:
 - <https://www.thesprucecrafts.com/cute-origami-fish-tutorial-2540969>
 - <https://www.youtube.com/watch?v=reQupTXxcMU>
- Copy handouts:
 - Genesis 1:20-23
 - 5 Ways to Help Birds/Fish Resource onto cardstock and cut apart

Description of Activities

Review what was created on the first four days, using visual cues from the first few STEM projects. Read the verses from Genesis 1:20-23 (available for download as a separate document). Ask:



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- What did God create on the fifth day?
- What kinds of birds can you name?
- What do you think it means when it says, “great sea monsters?”
- What kinds of things that live in the water can be described as things that creep?

Let students know that today you will be concentrating on fish and birds.

Ask: When the weather gets cold or there is no food for the birds to eat, what do they do? Of course, the answer is migrate! Show students this short film on bird migration.

https://www.youtube.com/watch?v=Q-mMMpl_T80

Ask: What did the film suggest you can do to help the birds? What else do you think you can do?

Possible answers include:

- Learn which types of birds live in and migrate through your area.
- Put stickers or paint on your windows so that birds don't fly into the them. If there are plants in your windows, consider removing them.
- Leave water or species-specific food outside. As more forests have been cut down and more buildings have been built, birds have lost some of their natural sources for food.
- Plant trees, flowers and bushes that attract birds. Learn about the plants and flowers that are native to your area and plant those.
- Turn off lights between dusk and dawn. Birds that travel by starlight can be confused and thrown off their route by other lights.
- Advocate. Is there legislation on the types of windows required in new buildings. Are new streetlights in the works? Be the voice of the birds.

Let students know that fish can also travel great distances during their lifetimes. Some can travel up to 3,500 miles. Many species of fish are born in rivers or lakes and travel to large bodies of water such as oceans, to live out their lives, coming back to their birthplace to lay eggs. Though not all of the eggs survive, they may have a greater chance of survival in quieter or less populated bodies of water.

Ask: What can we do to keep fish safe?

- Use less plastic. Plastic waste often ends up in bodies of water damaging or killing the wildlife that lives there.
- Several fish species are in danger due to loss of habitat and over-fishing. If your family eats fish, choose sustainable varieties.
- Don't buy products that exploit marine life, like coral jewelry, or products made from turtle shells or shark teeth.
- Reduce your carbon footprint. According to the World Wildlife Fund, oceans absorb approximately 90% of the excess heat caused by fossil fuels. Among other things, warmer waters affect the way in which marine life reproduces.



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- Advocate. Is your town considering any construction projects that might affect local waterways? Is there a move to restrict plastic? Get involved and advocate on behalf of the fish.

Give students origami paper and lead them through the creation of an origami bird or fish. **Tip:** This could be a great job for your madrichim.

If you choose, when they are done, they can embellish their creations with markers or googly eyes.

Use a ribbon to tie the Ways to Help Birds/Fish Resource to the origami.

Instruct students to tell their families about how they can care for creation by doing the small things mentioned on the cards.

Genesis 1:20-23	בראשית א:כ-כג
²⁰ God said, "Let the waters bring forth swarms of living creatures, and birds that fly above the earth across the expanse of the sky."	כ וַיֹּאמֶר אֱלֹהִים יִשְׂרְצוּ הַמַּיִם שָׂרָץ נֶפֶשׁ חַיָּה וְעוֹף יְעוֹפֵף עַל־הָאָרֶץ עַל־פְּנֵי רִקְיעַ הַשָּׁמַיִם:
²¹ God created the great sea monsters, and all the living creatures of every kind that creep, which the waters brought forth in swarms, and all the winged birds of every kind. And God saw that this was good.	כא וַיִּבְרָא אֱלֹהִים אֶת־הַתַּנִּינִם הַגְּדֹלִים וְאֵת כָּל־נֶפֶשׁ הַחַיָּה הַרֹמֶשֶׁת אֲשֶׁר שָׂרְצוּ הַמַּיִם לְמִינֵהֶם וְאֵת כָּל־עוֹף כָּנָף לְמִינֵהוּ וַיֵּרָא אֱלֹהִים כִּי־טוֹב:
²² God blessed them, saying, "Be fertile and increase, fill the waters in the seas, and let the birds increase on the earth."	כב וַיְבָרֶךְ אֹתָם אֱלֹהִים לֵאמֹר פְּרוּ וּרְבוּ וּמְלֵאוּ אֶת־הַמַּיִם בַּיַּמִּים וְהָעוֹף יִרְבֶּה בָּאָרֶץ:
²³ And there was evening and there was morning, a fifth day.	כג וַיְהִי־עֶרֶב וַיְהִי־בֹקֶר יוֹם הַחֲמִישִׁי:



Five Ways to Help Birds

Five Ways to Help Birds <ul style="list-style-type: none">• Put decals on your windows• Turn off your lights between dawn and dusk• Leash dogs and cats outside• Put out food and water• Be an advocate	Five Ways to Help Birds <ul style="list-style-type: none">• Put decals on your windows• Turn off your lights between dawn and dusk• Leash dogs and cats outside• Put out food and water• Be an advocate
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Five Ways to Help Fish

Five Ways to Help Fish <ul style="list-style-type: none">• Use less plastic• Reduce your carbon footprint• Don't buy products made from coral, turtle shells, or any part of a shark• Eat sustainable seafood• Be an advocate	Five Ways to Help Fish <ul style="list-style-type: none">• Use less plastic• Reduce your carbon footprint• Don't buy products made from coral, turtle shells, or any part of a shark• Eat sustainable seafood• Be an advocate
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6th Day of Creation

Objectives

Students will:

- Engage with a Torah text, Genesis 1:24-31, about the sixth day of creation
- Examine the relationship between human beings and other animals through the lens of Genesis 1:24-31
- Explore the different and similar characteristics of humans and other animals
- Think about what it means to be the “master” of all the animals

Materials Needed

- Handouts
 - Genesis 1:24-31
 - Venn Diagram
- Pens or pencils

Prepare in Advance

- Copy handouts
 - Genesis 1:24-31
 - Venn Diagram

Description of Activities

Review what was created on the first five days, using visual cues from earlier STEM projects.

Read the verses from Genesis 1:24-27 (available for download as a separate document). Ask:

- What did God create on the 6th day?
- Why do you think God created birds and creatures that live in water on one day and creatures that live on land on another day?
- In verse 26 God says, “Let us make man in our image, after our likeness.” Who do you think God is talking to?
 - One explanation is that God consulted the angels (Rashi)
 - Another explanation is that God called all that was made before to witness, as had been done in the days previous. For example, God made the waters and then the creatures that lived there; God made the heavens and then the celestial bodies. God calls all of creation, including the animals made in the previous days to be part of the creation of humankind by bearing witness.
 - A modern interpretation suggests that this is a proof-text for evolution, that God set the world on a course of growth and change that would eventually produce human beings. In this case, God would again be calling all that was created before to be part



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of the creation of man. This understanding of the text is often used to harmonize creation and evolution.

Ask:

- What does it mean to be made in the “image” or “likeness” of someone or something else?
- Do you think you are made in someone’s image?

In this lesson, students will focus on verses 26 and 28 which are about the relationship between human beings and animals.

Ask students to take a few moments and think about what they have in common with animals. Hand out blank Venn diagrams and pens or pencils. Ask students to choose an animal. Instruct them to label the left side of the diagram with the word “me” and the right side of the diagram with the name of the animal they have chosen. On the left side of the diagram they should write things that they have (e.g. body parts) or can do that the chosen animal can’t; on the right side they should do the same thing for the animal. In the place where the circles overlap, they should write what they have in common with their chosen animal.

Spend a few minutes allowing students to share what they discovered.

Reread verse 28 and ask: What does it mean to “rule the fish of the sea, the birds of the sky, and all the living things that creep on earth?”

Let students know that human beings share even more in common with other forms of life than they might think. Human beings share 99.9 percent in common with each other; the remaining .1 percent is what accounts for differences in eye color, body type and predispositions for things like diseases and talents. There is a 96% similarity between humans and chimpanzees. Following is a list of other living things and the percentage they share with human beings.

- Cat – 90%
- Mouse – 85%
- Cow – 80%
- Fruit-fly – 61%
- Chicken – 60%
- Banana – 60%

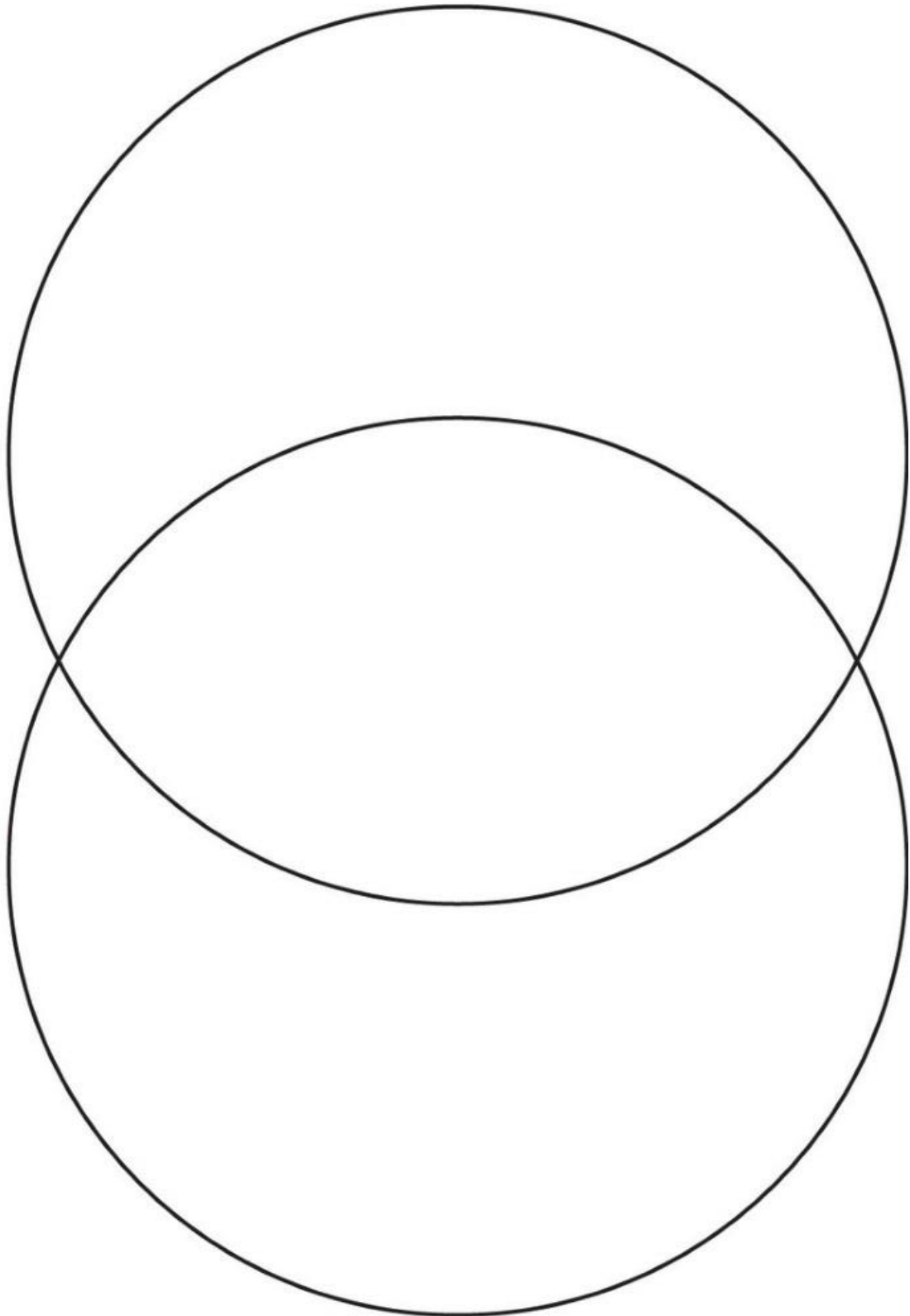
Ask: How does your idea about how people should “rule the fish of the sea, the birds of the sky, and all the living things that creep on earth” change knowing that you have so much in common with so many living things?

End this lesson by soliciting suggestions as to how students can show kindness to animals.



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Genesis 1: 24-31	בראשית א: כד-לא
<p>²⁴ God said, "Let the earth bring forth every kind of living creature: cattle, creeping things, and wild beasts of every kind." And it was so.</p>	<p>^{כד} וַיֹּאמֶר אֱלֹהִים תּוֹצֵא הָאָרֶץ נֶפֶשׁ חַיָּה לְמִינָהּ בְּהֵמָה וָרֶמֶשׂ וְחַיְתוֹ-אָרֶץ לְמִינָהּ וְיִהְיֶה כֵן:</p>
<p>²⁵ God made wild beasts of every kind and cattle of every kind, and all kinds of creeping things of the earth. And God saw that this was good.</p>	<p>^{כה} וַיַּעַשׂ אֱלֹהִים אֶת-חַיֵּית הָאָרֶץ לְמִינָהּ וְאֶת-הַבְּהֵמָה לְמִינָהּ וְאֶת כָּל-רֶמֶשׂ הָאֲדָמָה לְמִינֵהוּ וַיֵּרָא אֱלֹהִים כִּי-טוֹב:</p>
<p>²⁶ And God said, "Let us make man in our image, after our likeness. They shall rule the fish of the sea, the birds of the sky, the cattle, the whole earth, and all the creeping things that creep on earth."</p>	<p>^{כו} וַיֹּאמֶר אֱלֹהִים נַעֲשֶׂה אָדָם בְּצַלְמֵנוּ כְּדְמוּתֵנוּ וַיְרִדּוּ בְּדִגַּת הַיָּם וּבַעוֹף הַשָּׁמַיִם וּבַבְּהֵמָה וּבְכָל-הָאָרֶץ וּבְכָל-הָרֶמֶשׂ הָרֹמֵשׂ עַל-הָאָרֶץ:</p>
<p>²⁷ And God created man in God's image, in the image of God, God created him; male and female, God created them.</p>	<p>^{כז} וַיִּבְרָא אֱלֹהִים אֶת-הָאָדָם בְּצַלְמוֹ בְּצֶלֶם אֱלֹהִים בָּרָא אֹתוֹ זָכָר וּנְקֵבָה בָּרָא אֹתָם:</p>
<p>²⁸ God blessed them and God said to them, "Be fertile and increase, fill the earth and master it; and rule the fish of the sea, the birds of the sky, and all the living things that creep on earth."</p>	<p>^{כח} וַיְבָרֶךְ אֹתָם אֱלֹהִים וַיֹּאמֶר לָהֶם אֱלֹהִים פְּרוּ וּרְבוּ וּמְלֵאוּ אֶת-הָאָרֶץ וּכְבֹּשׁוּהָ וּרְדּוּ בְּדִגַּת הַיָּם וּבַעוֹף הַשָּׁמַיִם וּבְכָל-חַיַּיִת הָרֹמֶשֶׂת עַל-הָאָרֶץ:</p>
<p>²⁹ God said, "See, I give you every seed-bearing plant that is upon all the earth, and every tree that has seed-bearing fruit; they shall be yours for food.</p>	<p>^{כט} וַיֹּאמֶר אֱלֹהִים הִנֵּה נָתַתִּי לָכֶם אֶת-כָּל-עֵשֶׂב זֶרַע זֶרַע אֲשֶׁר עַל-פְּנֵי כָל-הָאָרֶץ וְאֶת-כָּל-הָעֵץ אֲשֶׁר-בוֹ פְּרִיעֵץ זֶרַע זֶרַע לָכֶם יִהְיֶה לְאֹכְלָהּ:</p>
<p>³⁰ And to all the animals on land, to all the birds of the sky, and to everything that creeps on earth, in which there is the breath of life, [I give] all the green plants for food." And it was so.</p>	<p>^ל וְלִכְלַחַיִת הָאָרֶץ וּלְכָל-עוֹף הַשָּׁמַיִם וּלְכָל-רֹמֵשׁ עַל-הָאָרֶץ אֲשֶׁר-בוֹ נֶפֶשׁ חַיָּה אֶת-כָּל-יֵרֶק עֹשֶׂב לְאֹכְלָהּ וַיְהִי-כֵן:</p>
<p>³¹ And God saw all that God had made, and found it very good. And there was evening and there was morning, the sixth day.</p>	<p>וַיֵּרָא אֱלֹהִים אֶת-כָּל-אֲשֶׁר עָשָׂה וְהִנֵּה-טוֹב מְאֹד וַיְהִי-עֶרֶב וַיְהִי-בֹקֶר יוֹם הַשֵּׁשִׁי: (פ)</p>





Shabbat

Objectives

Students will:

- Engage with a Torah text, Genesis 2:1-3, about Shabbat
- Play “freeze dance” and engage in a conversation about starting and stopping
- Learn Newton’s first law of motion
- Investigate Newton’s first law of motion through experimentation

Materials needed:

- Handouts
 - Genesis 2:1-3
- Balls in a few different sizes, none with stitching
- Duct tape
- A yardstick
- A broom handle
- A music player

Prepare in Advance:

- Copy handouts
 - Genesis 2:1-3
- Pick a few high-energy songs to use in a game of freeze dance
- Clear a length of floorspace in your classroom or find a hallway for Newton experiments

Description of Activities

Review what was created on the first six days, using visual cues from earlier STEM projects.

Read the verses from Genesis 2:1-3 (available for download as a separate document). Ask:

- What happened on the seventh day?
- Do you think it was easy or difficult for God to stop creating things after creating things for six days in a row?
- What is one activity that you find hard to stop? Why is it difficult to stop? Is there an activity that you find easy to stop? Do you think it was difficult or easy for God to stop creating? What makes you think so?
 - Note here that it is particularly difficult to stop if you are in the middle of creating something like a Lego building, a drawing, or story; or if you are in the middle of something that isn’t finished like a sports or board game, a TV program or song. But that



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it might be easier to stop if you are finished. What if God was done? We do not hear about God creating anything else after the week is up.

Engage students in a game of freeze dance. Let them know that you will play music and they should dance with as much energy as they can. When the music stops, they should stop as quickly as they can. You might choose to play a whole game in which players who didn't stop immediately are "out." The game is played until there is one player left standing. You might also simply play a few rounds, letting everyone stay in the game.

Invite students to return to seats and ask:

- Was it easy or difficult to stop once you were dancing? Why?

Tell students about Isaac Newton and his first law of motion. The law is often stated as follows: An object at rest will remain at rest and an object in motion will remain in motion with uniform speed and direction unless acted upon by an outside force. This phenomenon is called inertia.

Gather students at one end of a classroom where you have cleared a long path or in a nearby hallway. Solicit students to roll balls down the length of the classroom or hallway and to observe what happens. Do this a few times so that students can make observations about differences in speed and duration of the roll.

Tape a yardstick to the floor at about half the distance of the longest roll. Ask students to repeat the experiment and observe the results. Repeat this process, this time using a broom handle. One again, instruct students to observe.

Ask:

- What did you observe when the ball was rolled and there was nothing in its way?
- What did you notice when the yardstick was in the way?
- What did you notice when the broom handle was in the way?
- Does this prove or disprove Newton's first law?
- What are some other reasons that the ball might have stopped?

Optional: For comparison, use a ball that has some texture or stitching. This could be a good example of an outside force if the stitching throws the ball off course.

Note: Students may have noticed that the ball slowed or stopped eventually before hitting one of the pre-set obstacles or a wall. These phenomena can be explained by Newton's second law: "The acceleration of an object as produced by a net force is directly proportional to the magnitude of the



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net force, in the same direction as the net force, and inversely proportional to the mass of the object, includes such things as force and friction.”

Ask:

- What does this have to do with Shabbat?
- What are the benefits of stopping an activity or resting (even if we don't want to)?

Genesis 2:1-3	בראשית ב:א-ג
¹ The heaven and the earth were finished, and all their array.	א וַיֵּכֶּלּוּ הַשָּׁמַיִם וְהָאָרֶץ וְכָל־צִבְּאָם:
² On the seventh day God finished the work that God had been doing, and God ceased on the seventh day from all the work that God had done.	ב וַיֵּכֶּל אֱלֹהִים בַּיּוֹם הַשְּׁבִיעִי מְלַאכְתּוֹ אֲשֶׁר עָשָׂה וַיִּשְׁבֹּת בַּיּוֹם הַשְּׁבִיעִי מִכָּל־מְלַאכְתּוֹ אֲשֶׁר עָשָׂה:
³ And God blessed the seventh day and declared it holy, because on it God ceased from all the work of creation that God had done.	ג וַיְבָרֶךְ אֱלֹהִים אֶת־יוֹם הַשְּׁבִיעִי וַיְקַדֵּשׁ אֹתוֹ כִּי בּוֹ שָׁבַת מִכָּל־מְלַאכְתּוֹ אֲשֶׁר־בָּרָא אֱלֹהִים לַעֲשׂוֹת:



Havdalah

Objectives

Students will

- Read (or hear) and discuss the final Havdalah blessing
- Create a density tower
- Explore heavy and light liquids as a metaphor for work and rest

Materials Needed

- Copies of the final Havdalah blessing (available as a separate download)
- A tall glass or cylindrical vase, more than one if you want to split students into smaller groups
- Several different liquids
 - Pancake syrup or honey
 - Whole Milk
 - Dish Soap
 - Water
 - Vegetable Oil
 - Rubbing alcohol
- Food coloring (two colors, which are different than the oil and the dish soap)
- Paper cups
- Table covers
- Plastic spoons
- A funnel or turkey baster
- Optional: Items to drop into the density tower—ping-pong ball, screw, die, cherry tomato, popcorn kernel, etc.
- Carpet squares or masking tape for demonstrating density

Prepare in Advance

- Purchase or collect supplies
- Make copies
- Review the directions for making a density tower. This video provides a good tutorial: <https://www.youtube.com/watch?v=9IcWwUH-Wj4>
- Optional: Pour equal amounts of liquids into six cups
- Cover Tables

Description of Activities

Remind students of what happened on the first six days of creation, using the STEM projects from the first six days as visual cues.



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Remind students what happened on the seventh day: God rested. (Optional: Read Genesis 2:1-3, available as a separate download.)

Ask:

- What are some of the things you (or your parents) do that you would consider work?
- What are some of the things that you (or your parents) do that you would consider resting?
- How does working or knowing you have to work make you feel?
- How does resting or knowing you get to relax make you feel?

Let students know about Havdalah, the ceremony at the end of Shabbat marking the difference between sacred (holy) and secular (regular, ordinary). Let them know that the Havdalah ceremony consists of four main blessings:

- Wine
- Spices
- Candle
- Separation of sacred and secular

Together, read the final Havdalah blessing (available in a separate download).

Ask:

- What is something you consider holy?
- What is something you consider regular, or everyday?
- What are some things that you keep separate from one another? Examples might include:
 - Clothes: underwear and shirts might be kept in separate drawers, play clothes and fancy clothes might be separate
 - Food: some is kept in cabinets, or the refrigerator or freezer
 - School books and personal books
 - Everyday dishes and fancy dishes

Let students know that they'll be performing an experiment about separation.

A density tower showcases the densities of different liquids as liquids with decreasing densities sit on top of one another without mixing. The following experiment uses six liquids; there are sources for using as many as nine. If six seems to be too many, you can use fewer, as long as you keep them in the same order.

Directions:

1. Place a large cylindrical vase or glass in the middle of a table. If you are doing multiple experiments to allow for more participation, split students into groups of six and place a vase or glass in front of each group. (You can split the students into smaller groups: this will just take more materials and more supervision.)



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2. Instruct a student to pour syrup into the glass or vase until there is approximately one inch of liquid at the bottom. If you prefer, you can pre-fill small cups with liquids to avoid in-class measurement.
3. Instruct another student to slowly pour the milk on top of the syrup.
4. Instruct another student to slowly pour the dish soap on top of the milk.
5. Invite a student to add food coloring to the water.
6. Instruct a student to pour the water on top of the dish soap. This should be done very slowly and with extreme care. It is best executed by using a turkey baster or funnel or allowing the liquid to spill off the back of a spoon.
7. Instruct a student to pour oil in the same manner.
8. Invite a student to add food coloring to the alcohol.
9. Instruct a student to pour the alcohol in the same manner as the water and oil.

Ask students what they noticed. Were they surprised by anything?

Let them know that the liquids with greater density stayed at the bottom and the liquids with lesser density were able to rest on top of these.

Demonstrate the idea of density. Place three carpet squares on the ground or mark off three one-foot squares on the ground. Ask one person to stand in one square and two people to stand in another square. Invite as many students as can fit to stand in the third square. Density is the amount of something that can fit in an area. In this case, the floor area crammed with people is like the syrup and the floor area with just one or two people is like the alcohol.

Ask: How is greater density—or lots of things crammed closely together—like work? How is lesser density—or fewer things occupying one space—like rest or freedom?

The density tower had six layers. Looking from the top, the liquids go from “light” to “heavy.” God rested after six days. Once God started creating life, it went from less complex to more complex. Ask:

- Do you always finish a project? If you don’t, what makes you stop?
- When you start a project, as the work goes along does it get easier or harder.
- What encourages you to finish a project, even if it gets more complex as you go along?

Optional: Have students carefully and slowly place objects into the liquid and observe where they land. A screw will fall to the bottom, a cherry tomato will stop in the middle and a ping pong ball will rest on top. Ask: How is density (the concentration of weight compared to size) connected to work? Remind students that one of the ways we honor the holiness of Shabbat is to separate it from the rest of the days of the week both through Jewish ceremonies, like Havdalah, and the things we choose to do on that day.



Jewish Texts

Genesis 2:1-3

Genesis 2:1-3	בראשית ב:א-ג
¹ The heaven and the earth were finished, and all their array.	א וַיְכַלּוּ הַשָּׁמַיִם וְהָאָרֶץ וְכָל־צְבָאָם:
² On the seventh day God finished the work that God had been doing, and God ceased on the seventh day from all the work that God had done.	ב וַיְכַל אֱלֹהִים בַּיּוֹם הַשְּׁבִיעִי מְלַאכְתּוֹ אֲשֶׁר עָשָׂה וַיִּשְׁבֹּת בַּיּוֹם הַשְּׁבִיעִי מִכָּל־מְלַאכְתּוֹ אֲשֶׁר עָשָׂה:
³ And God blessed the seventh day and declared it holy, because on it God ceased from all the work of creation that God had done.	ג וַיְבָרֶךְ אֱלֹהִים אֶת־יוֹם הַשְּׁבִיעִי וַיְקַדֵּשׁ אֹתוֹ כִּי בּוֹ שָׁבַת מִכָּל־מְלַאכְתּוֹ אֲשֶׁר־בָּרָא אֱלֹהִים לַעֲשׂוֹת:

Final Havdalah Blessing

בָּרוּךְ אַתָּה יי, אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם, הַמְבַדִּיל בֵּין קֹדֶשׁ לְחֹל, בֵּין אֹר לְחָשֶׁךְ, בֵּין יִשְׂרָאֵל לְעַמִּים, בֵּין יוֹם הַשְּׁבִיעִי לְשֵׁשֶׁת יְמֵי הַמַּעֲשֶׂה. בָּרוּךְ אַתָּה יי, הַמְבַדִּיל בֵּין קֹדֶשׁ לְחֹל.

Blessed are You, Adonai our God, Ruler of the Universe, who distinguishes between sacred and secular, between light and darkness, between Israel and the nations, between the seventh day and the six days of work. Blessed are You, Adonai, who distinguishes between sacred and secular.