Topic

- Children, places, and hobbies

- Learn about Serbia

Learning Objectives

- Making observations of the photograph
- Inferring places based on objects in context
- Using critical thinking skills to compare and contrast personal lives with those of the Serbian girl in the photograph

Language

- The girl is at home.
- The girl likes to paint.





Component

- E-book on CWT (Caves WebSource for Teachers)



Introducing Serbia

See Introducing Global Citizenship Education (GCE), Teacher's Manual page 16.

Serbia is a country in Southeastern Europe. It is surrounded by land and other countries, so there are no beaches, but there are many mountains where plums, apples, pears, and raspberries grow for export. There is also a river called Year (Vrelo) because it is 365 meters long. In Serbia, the family is very important, so it's common for multiple generations to live in the same household. Traditional Serbian food is a blend of different cultures and regions throughout history. Some classic dishes include stuffed peppers, sweet or savory cheese pie, and Serbian hamburger, which is made with ground beef, pork, or lamb. When celebrating holidays, Serbians buy trees for New Year instead of Christmas.

Ask students:

Q1 Where is the girl? (Follow-up question: How can you tell? or How do you know?)
A1 She is (at home / at school / inside / in a class).

Q2 What does she like to do? (Follow-up question: What do you like to do?)
 A2 She likes to paint.



Think and Check

Overview

See Teaching Observation and Critical Thinking, Teacher's Manual page 16.

- Write page thirteen 13 on the board for students to read aloud. Say, Open your books. Find page 13, gesturing or pantomiming as you speak so students can infer the meaning (see Teaching Vocabulary, page 15 for more details on TPR). Read the first sentence aloud as you point to each word, raising the intonation of your voice after at home and on the street to effectively make each choice a question. This will help students to infer there is a choice to be made.
- Ask, is the girl outside on the street? Model the answer for your students by using exaggerated gestures (point out the window if there is one, shake your head "no," make an "x" with your arms, etc.). Enthusiastically say She is NOT on the street and pantomime drawing an "x" in the corresponding box.

- 3. Ask again, Where is the girl? Model the answer by using exaggerated gestures (draw or show a picture of a house, sound out the words slowly, nod your head "yes," etc.). Say The girl is at home and pantomime drawing a check in the correct box.
- Repeat with #2. Continue to use TPR, pictures, or realia in the classroom so that students can infer meanings of new words and sentence patterns.

Topic		Overview
- Family members	2	Jobs
Learning Objectives		
 Asking about family Expressing hobbies 	-	Identifying jobs
Language		
 What does your mom do? She's a police officer. That's great! My mom is a scientist. 	-	What does your sister like to do? She likes to sing.
Teaching Materials		
- 10 vocabulary flashcards of this unit		
- Tracks 08-11		

Warm-Up

See *Teacher's Manual* pp. 18-21 for details on all Warm-ups and Activities in this book.

- Play Jumping Game to help students warm up to their new environment and classmates.
- Play The Name Game so that students can get to know each other.

A. Listen, point, and say.

See Teaching Vocabulary, Teacher's Manual page 15.

- Introduce the jobs and hobbies vocabulary using flashcards. Show one card at a time and say the name of the item. Have students repeat the words several times each.
- 2. Write page fourteen 14 on the board for students to read aloud. Say, Open your books. Find page 14, gesturing or pantomiming as you speak so students can infer the meaning (see Teaching Vocabulary, page 15 for more details on TPR). Ask them to name any objects or characters they can across the two pages. Direct them to activity A. Have them name the jobs and hobbies.
- Play Track 08. Have students listen to the words. Replay the track with students pointing to and repeating the items they can identify.



Student Book pages 14-15

lawyer x2	police officer x2
scientist x2	read x2
astronaut x2	ride a bike x2
painter x2	play basketball x2
doctor x2	listen to music x2

B. Listen and number.

See Teaching Vocabulary, Teacher's Manual page 15.

- Review the numbers 1-10 if necessary. See if students can guess which number you are drawing in the air.
- Direct students to activity B. Play Track 09. Have students listen to the track and fill in the numbers.

1. listen to music x2	6. police officer x2
2. ride a bike x2	7. lawyer x2
3. scientist x2	8. read x2
4. doctor x2	9. painter x2
5. play basketball x2	10. astronaut x2

 When complete, ask, What is number one?
 Encourage students to answer in a complete sentence, such as *It is "listen to music."* Write the number above the correct flashcard or picture on the board.

See Student Book Answer Key, Teacher's Manual pages 118-121.



C. Listen and count.

See Teaching Active Listening, Teacher's Manual page 16.

- Play Track 10 which will introduce the situation in the picture. Have students listen to the track and follow the instructions.
 - Liam, Victor, and Emma are at Olivia's house. They look at pictures of their families. Olivia's dad cooks dinner. Her brother Marco helps their dad. Marco also makes a video. He shows how to make fruit salad. Count the apples. Olivia's whole family likes to

three apples on the desk.

 cook, but Liam only wants to eat! x2
 When complete, ask, Where are the apples? Encourage them to point to the area in their books and perhaps say On the desk. Ask, How many apples

are on the desk? Encourage them to say, There are

Activities

See Teacher's Manual pp. 18-21 for details on all Warm-ups and Activities in this book.

- Drill the new sentence patterns and vocabulary from this lesson with a quick and high energy round of Three Times.
- Play Dice Game to review the language from this lesson and have fun with some silly rules.

Extra Practice

Inside Out 2 Workbook, pp. 6-7. Have your students do this for homework or in class. See *Teacher's Manual* pp. 122-128 for instructions and answer key.

Components

You can find the following resources on CWT:

- Flashcards
- Conversation Video

D. Listen to the dialogue.

See Teaching Conversation, Teacher's Manual page 16.

Play Track 11. Have students listen to the dialogue. Replay the track with students mimicking the speech. Focus on natural intonation, rhythm, and speed.

Please note: Blue speech bubbles review previously taught language, while pink and yellow speech bubbles introduce new language for this unit.



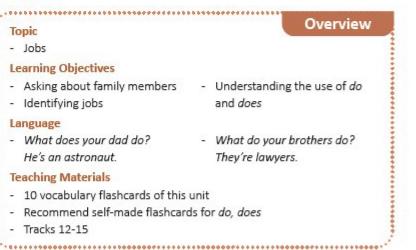
(blue) Emma: How many people are there in your family?

(blue) Olivia: There are six people in my family. (pink) Emma: What does your mom do? (pink) Olivia: She's a police officer.

(pink) Emma: That's great! My mom is a scientist.

(yellow) Victor: What does your sister like to do? (yellow) Liam: She likes to sing.

Now, listen again and repeat.



Warm-Up

Topic

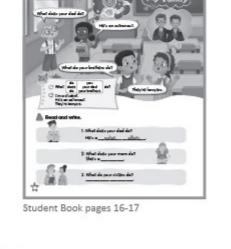
- Jobs

- 1. Play Circle Count to quickly warm-up and review numbers.
- 2. Play Character Freeze to review jobs and hobbies in an imaginative way.

Listen and say.

See Teaching Active Listening, Teacher's Manual page 16.

- 1. With books closed, play Track 12. Emphasize do and does with self-made flashcards. Replay the track. Have students mimic the speech, focusing on natural intonation, rhythm, and speed.
- Liam: What does your dad do? Emma: He's an astronaut. Victor: What do your brothers do? Girl: They're lawyers. What do you do? I'm a student. What does your dad do? He's an astronaut. What do your brothers do? They're lawyers.
- 2. Write page sixteen 16 on the board for students to read aloud. Say, Open your books. Find page 16, using TPR as needed. Ask students to name anything they can across the two pages. Direct students to the "Listen and say" activity. Replay Track 12.



A. Read and write.

See Teaching Writing, Teacher's Manual page 16.

1. Direct students to activity A. Say, Look at number one. What does it say? Transcribe their sentences onto the board.

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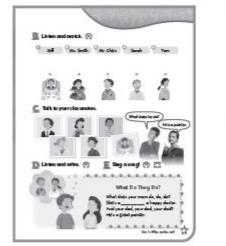
- 2. Show the police officer flashcard. Ask, What does your dad do? Have students answer in a complete sentence. Fill in the blank spaces on the board. asking How do you spell police officer? Encourage students to spell in chunks, such as p-o, I-i-c-e.
- 3. Say, It's your turn. Read and write. While students work, copy the remaining items onto the board.
- 4. After some time, say, Let's check our work, Number two: What does your mom do? Have students dictate a complete sentence to you. Repeat with #3. See Student Book Answer Key, Teacher's Manual pages

118-121.

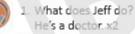
B. Listen and match.

See Teaching Active Listening, Teacher's Manual page 16.

1. Randomly put up three job flashcards on the board. Above them, write Ms. Smith, Mr. Chen, and Sarah. Say, Ms. Smith is a (scientist). Pretend to have trouble finding the correct flashcard. When students help you locate it, draw a line from the name to the flashcard, explaining They match. Repeat demonstration as needed.



2. Direct students to activity B. Have them read the names, identify the jobs, and guess who might do what. Play Track 13. While students work, place the correct names and flashcards on the board.



- He's a doctor, x2 2. What does Ms. Smith do?
- She's a painter, x2 3. What does Mr. Chen do?
- He's an astronaut, x2 4. What does Sarah do?
- She's a police officer, x2 5. What does Tom do?
- He's a scientist, x2
- 3. Say, Let's check our work. Number one: What does Jeff do? Encourage students to answer He's a doctor. Draw a line from the name to the correct flashcard on the board. Repeat with #2-5.

See Student Book Answer Key, Teacher's Manual pages 118-121.

C. Talk to your classmates.

See Teaching Conversation, Teacher's Manual page 16.

- 1. Direct students to activity C. Have them dictate as you transcribe the conversation in the speech bubbles onto the board. Say, Close your books.
- 2. Demonstrate with a volunteer. Put all the job flashcards on the board. Point to one and ask. What does (he) do? Encourage the volunteer to answer. Switch places. Now the volunteer asks the question.

Activities

- Play Jump the Line to review do and does. Keep it short and quick by prompting students with pronouns or family members only.
- Play Bingo to review jobs, or Flyswatter for a higher energy activity.

Extra Practice

Inside Out 2 Workbook, pp. 8-9. Have your students do this for homework or in class. See Teacher's Manual pp. 122-128 for instructions and answer key

Component

You can find the following resource on CWT: Song Video

3. Place the flashcards around the room. Students can point to a flashcard when it's their turn to ask. Have students work in groups and practice with as many partners as possible within a short time limit. Use Down the Line for more structure.

D. Listen and write.

See Teaching Active Listening, Teacher's Manual page 16.

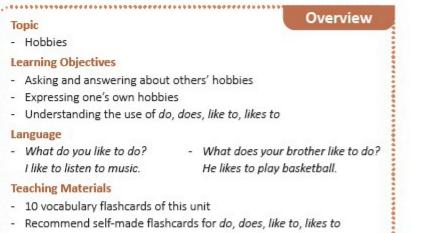
- 1. Write She's a ____, a happy doctor. on the board. Have students guess what might go into the blank. Say, Let's listen and find out.
- 2. Direct students to activity D. Play Track 14. Have students listen and follow along in their books.

What does your mom do, do, do? She's a doctor, a happy doctor. And your dad, your dad, your dad? He's a great painter.

E. Sing a song!

See Teaching Songs and Chants, Teacher's Manual page 17.

- 1. Say, Let's learn the words to a song.
- 2. Read the lyrics aloud slowly. Repeat and have students chant with you, matching the song's rhythm.
- 3. Play Track 15 to familiarize students with the melody. Replay and encourage students to sing along.



- Tracks 16-17

Warm-Up

- Play Hide Your Tail to review the language from this lesson and warm up with some laughs.
- Play Movement Dominoes to explore what the hobbies vocabulary looks like in action.

Listen and say.

- See Teaching Active Listening, Teacher's Manual page 16.
- With Student Books closed, play Track 16. Emphasize do, does, like to, and likes to with self-made flashcards. Replay the track. Have students mimic the speech, focusing on natural intonation, rhythm, and speed.

Jen: What does your brother like to do? Olivia: He likes to play basketball. Kate: What do you like to do? Liam: Like to listen to music.

What do you like to do? I like to listen to music. What does your brother like to do? He likes to play basketball.

 Write page eighteen 18 on the board for students to read aloud. Say, Open your books. Find page 18, using TPR as needed. Ask students to name anything they can across the two pages. Direct students to the "Listen and say" activity. Replay Track 16.

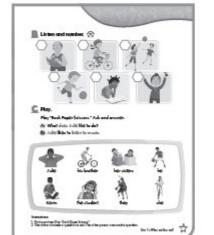


Student Book pages 18-19

A. Read and write.

See Teaching Writing, Teacher's Manual page 15.

- Direct students to activity A. Say, Look at number one.. What does it say? Transcribe their sentences onto the board.
- Show the read flashcard. Ask, What does Fred like to do? Have students answer in a complete sentence.
 Fill in the blank space on the board, asking, How do you spell read?
- Say, It's your turn. Read and write. While students work, copy the remaining items onto the board.
- After some time, say, Let's check our work. Number two: What does Jane like to do? Have students dictate a complete sentence to you. Repeat with #3.
 See Student Book Answer Key, Teacher's Manual pages 118-121.



B. Listen and number.

See Teaching Active Listening, Teacher's Manual page 16.

- 1. Review the numbers 1-10 if necessary. See if students can guess which number you are drawing in the air.
- Direct students to activity B. Play Track 17. Have students listen to the track, say the numbers and point to the corresponding pictures. Replay the track and have students fill in the numbers.
 - 1. What does she like to do? She likes to read. x2
 - 2. What does Finn's brother like to do? He likes to listen to music. x2
 - What does your sister like to do? She likes to ride a bike. x2
 - What do they like to do? They like to play basketball. x2
 - What does your grandpa like to do? He likes to read books. x2
 - 6. What does he like to do?
 - He likes to play basketball. x2
- Say, Let's check our work. Number one: What does she like to do? Encourage students to answer in a complete sentence as you write the number above the correct flashcard or picture on the board. Repeat with #2-6.

See Student Book Answer Key, Teacher's Manual pages 118-121.

Activities

- Play Jump the Line to review do, does, like to, and likes to. Instead of trying to expose students to as many prompts as possible, focus on speed of acquisition by only using 4-5 prompts per round.
- Play Big Wind Blows. Seated students can ask "It," What do you like to do? When It answers something silly, such as I like to ride a chicken, everyone must sit in a different chair.

Extra Practice

Inside Out 2 Workbook, pp. 10-11. Have your students do this for homework or in class. See *Teacher's Manual* pp. 122-128 for instructions and answer key.

omponent

You can find the following resource on CWT:

- Vocabulary and Grammar Worksheet

C. Play.

See Teaching Conversation, Teacher's Manual page 16.

- On the board, draw or place 3-4 pictures of people enjoying different activities, such as those in the Student Book. Write names for each picture, such as Julie or they. Demonstrate with a volunteer. Play "Rock, Paper, Scissors." The winner (Player 1) chooses a picture and asks a question, such as What does Julie like to do? Player 2 answers, Julie likes to listen to music. Repeat demonstration as needed with a new volunteer.
- Divide students into small groups. Give them a set time to play, using the Student Book pictures. After some time, change up the groups and play again.

Overview

Unit 1 What Do You Do?

Topic

- Short vowel blends an, ap, and at

Learning Objective

- Learning words ending with the short vowel blends an, ap, and at

Language

- pan, fan, map, cap, hat, bat

Teaching Materials

- Recommend self-made flashcards for the phonics vocabulary

- Tracks 18-20

Warm-Up

- Sing "The Alphabet Song" to help your students review the letter names.
- Write the short vowel blends an, ap, and at on the board. Show students self-made flashcards, realia, or draw pictures for the phonics vocabulary. Show, stress the V-C blend, then build the item's name by breaking up the C-VC structure, and finally say the whole name (such as /æ/ - /n/ - an, /p/ - /æn/ - pan). Ask students to repeat after you.

A. Listen, point, and say.

See Teaching Phonics, Teacher's Manual page 15.

- Write page twenty 20 on the board for students to read aloud. Say, Open your books. Find page 20. Ask them to name anything they can on page 20 alone.
- Direct students to activity A. Play Track 18 and have students listen. Replay the track with students pointing to the objects and repeating after the speaker.
 - /æ/- /n/- an, /p/- /æn/- pan pan x2 /æ/- /n/- an, /f/- /æn/- fan - fan x2 /æ/- /p/- ap, /m/- /æp/- map - map x2 /æ/- /p/- ap, /k/- /æp/- cap - cap x2 /æ/- /t/- at, /h/- /æt/- hat - hat x2 /æ/- /t/- at, /b/- /æt/- bat - bat x2

B. Listen and number.

See Teaching Phonics, Teacher's Manual page 15.

 Direct students to activity B. Have students listen to Track 19, point to the corresponding picture and say

			and reinbes. 🕐
(i)) pan o de tan	10	map cap	hat bat
	a	o =	a
0 =			
0	a	o 📃	a

Student Book pages 20-21

the number they should write. Replay the track and have students write the numbers.

1. bat x2	3. hat x2	5. fan x2
2. cap x2	4. pan x2	6. map x2

 Say, Let's check our work. What is number one? Have students answer in a complete sentence, such as (*It is*/*It's*) a bat. Write the number above the correct self-made flashcard or picture at the board. Repeat with #2-6.

See Student Book Answer Key, Teacher's Manual pages 118-121.

C. Listen and write.

Overview

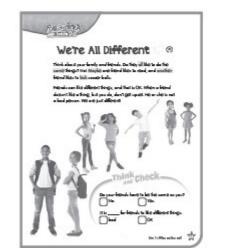
See Teaching Phonics, Teacher's Manual page 15.

- Write several <u>a</u> prompts on the board for volunteers. Point to the blank spaces and ask, What letter goes here? Listen and write. Randomly say one of the new vocabulary words from this lesson. Encourage students to fill in the spaces. Repeat the demonstration as needed.
- Say, It's your turn. Listen and write. Play Track 20. While students work, copy #1-6 onto the board.

3	1. fan x2	3. hat x2	5. cap x2
Ø	2. map x2	4. pan x2	6. bat x2

 Say, Let's check our work. What is number one? Have students answer in a complete sentence, such as I(It is/It's) a fan, as you fill in the blanks on the board. Repeat with #2-6.

See Student Book Answer Key, Teacher's Manual pages 118-121.



We're All Different

See Teaching Reading, Teacher's Manual page 15.

- Connect with the story. Before listening to the story, have students name anything they can on page 21. Read the title of the story aloud. Point out the language they have already learned.
- Read along. Play Track 21. Students listen to the story and follow along in their books. Encourage students to point to the words as they listen. Then have them read along with you, trying to match the intonation and rhythm.
 - Think about your family and friends. Do they all like to do the same things? No! Maybe one friend likes to read, and another friend likes to

kick soccer balls. Friends can like different things, and that is OK. When a friend doesn't like a thing, but you do, don't get upset. He or she is not a bad person. We are just different!

- 3. Paired reading. Have students take turns trying to read the story sentences in small groups or pairs.
- Act it out. Have students work in pairs to act out the story, using realia of soccer balls or simply pantomiming the action.

Think and Check

See Teaching Observation and Critical Thinking, Teacher's Manual page 16.

Topic

- Story: We're All Different

Learning Objectives

- SEL (Social Awareness)
- Reading a story that recycles the language from Unit 1

Language

- all, same, maybe, another, kick

Teaching Materials

- Several soccer balls, or other similar varieties if available
- Self-made flashcards for all, same, maybe, another, kick

- Track 21

Extra Practice

Inside Out 2 Workbook, pp. 12-13. Have your students do this for homework or in class. See Teacher's Manual pp. 122-128 for instructions and answer key.

Components

You can find the following resources on CWT:

- GCE/SEL Worksheet Me and the World Video
- Wrap-up Video Test Bank
- Games

COP (Caves Online Practice)

- Direct students to the "Think and Check" activity, using TPR as needed. Read the first sentence aloud as you point to each word, raising the intonation of your voice after No and Yes to effectively make each choice a question. This will help students to infer there is a choice to be made.
- Ask, What do you think? If students struggle, reread the first paragraph of the story, emphasizing Do they all like to do the same things? Once students can answer correctly, pantomime drawing a check and say, Check "No."
- Repeat with #2. If students struggle with the choices, encourage them to find the corresponding sentence in the story.

Review 1

Topic

Overview

Yes, I am.

Vocabulary and sentence patterns from Units 1-2

Learning Objectives

- Asking about family members
- Asking and answering about others' hobbies
- Expressing one's own hobbies

- Identifying jobs
- Understanding the use of do, does, like to, likes to, feel, feels
- Asking about feelings using Are you (adj)? and How questions
- Using the contractions I'm, She's, He's

Language

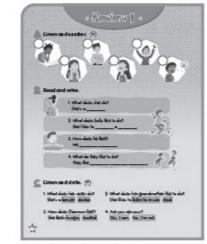
- What does he do? - How does he feel? He's a police officer. He feels sick.
- What does she do? Are you nervous? She's a doctor.
- What does he like to do? He likes to read.

Teaching Materials

- 20 vocabulary flashcards from Units 1-2
- Tracks 36-37
- Dice, enough for small groups of 3-4
- A small board-game marker for each student

Warm-Up

- 1. Play Charades or Character Freeze to review vocabulary from Units 1-2. If playing Character Freeze, try making combos like cold police officer or thirsty scientist.
- 2. Play Memory or Go Fish. Before playing, create multiple sets of playing cards containing vocabulary from Units 1-2. You can also have students make these cards as a separate class activity.



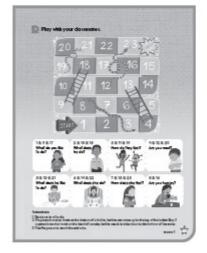
Student Book pages 32-33

A. Listen and number.

See Teaching Active Listening, Teacher's Manual page 16.

- 1. Write page thirty-two 32 on the board for students to read aloud. Say, Open your books. Find page 32. Encourage them to name anything they recognize across the two pages. Direct students to activity A. Have them make statements about each picture. such as She likes to read. Put the corresponding flashcards onto the board in the same order as the Student Book.
- 2. Say, Let's listen and number, using TPR as needed. Play Track 36. Have students write numbers in the spaces according to the prompts they hear.
 - 1. He's a police officer, x2 2. Betty likes to read, x2
 - 3 He likes to listen to music x2
 - 4. I feel nervous, x2
 - 5. Are you thirsty? x2
 - 6 I feel hot x2
- 3. Say, Let's check our work. What is number one? Have students answer in a complete sentence. Write the number above the correct flashcard at the board. Repeat with #2-6.

See Student Book Answer Key, Teacher's Manual pages 118-121



B. Read and write.

See Teaching Writing, Teacher's Manual page 16.

- 1. Direct students to activity B. Say, What does number one say? Read it to me. Transcribe the sentences onto the board. This is a good chance for teaching new words like blank and period in context.
- 2. Ask. What does she do? Have students dictate a complete sentence to you. Ask, How do you spell doctor? Encourage students to spell in chunks, such as d-o-c, t-o-r.
- 3. Say, It's your turn. Read and write. While students work, copy the remaining items onto the board as they appear in the Student Book.
- 4. After some time, say Let's check our work. Number two: What does Sally like to do? Have students dictate a complete sentence to you. Make deliberate mistakes or ask about spelling. Repeat with #3-4.

See Student Book Answer Key, Teacher's Manual pages 118-121.

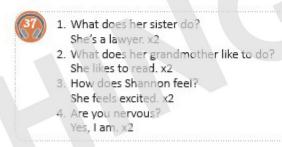
C. Listen and circle.

See Teaching Active Listening, Teacher's Manual page 16.

1. Copy #1-4 onto the board as they appear in the Student Book. Review the options with students. Ask, What do you think? Encourage them to guess which choice might be the correct answer.

Extra Practice

Inside Out 2 Workbook, pp. 22-23. Have your students do this for homework or in class. See Teacher's Manual pp. 122-128 for instructions and answer key.



- 2. Say, It's your turn. Listen and circle. Play Track 37. Have students circle the answers in their books.
- 3. Say, Let's check our work. What is number one? Encourage them to answer in complete sentences as you circle the correct answers on the board.

See Student Book Answer Key, Teacher's Manual pages 118-121.

D. Play with your classmates.

See Teaching Conversation, Teacher's Manual page 16.

- 1. Draw a simple "snakes and ladders" board game on the board. Demonstrate with a volunteer. Play "Rock, Paper, Scissors" to determine who goes first. Player 1 rolls the dice, moves their magnet onto the corresponding space, and checks the Student Book to read the corresponding question aloud. Player 1 must answer correctly to stay on that space. Alternatively, have the class read the question aloud so they are more active. Play until the class understands.
- 2. Divide students into small groups of 3-4. Give each group a dice. Have groups play "Rock, Paper, Scissors" or roll the dice for the largest number to establish who may move first in the board game.
- 3. Give students a set time to play or watch for when most groups are nearly finished. Change up the groups and have students play again, if time allows.

Upside Down Lab 1

Overview

Students will create a simple thermometer that will demonstrate basic temperature change.

Materials for each student:

1 small glass jar or bottle, 1 permanent marker, 1 straw, 1 heat-resistant glass bowl filled with very hot water, 1 glass bowl filled with ice water, 1 small tube of watercolor paint, 1 small piece of clay

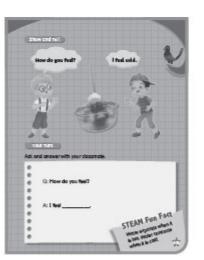
Warm-Up

1. Play Simon Says to review simple commands.

 Play the "Hot and Cold" game. Choose a student to be the seeker. Hide an object in the room. When the student moves closer to the object, say You're getting hotter. When he/she moves farther away, say You're getting colder. Play in small groups to increase student talking time.



Student Book pages 100-101



Show and Tell

In pairs or small groups, students take turns asking each other *How do you feel*? To answer, students can place their thermometer into one of the bowls and answer appropriately. For example, a student places their thermometer into the hot water and says *I feel hot*. For an added challenge, brainstorm in what situations we might feel hot or cold, for example when sick, when wearing certain clothing, or during a particular season.

Your Turn

Have students fill in the blank space in their Student Books. Encourage them to ask *How do you spell (cold)?* as needed. Give students time to walk around the classroom and practice this dialogue. Challenge students further by brainstorming other ways to answer the question, for example *sick, nervous, hungry, or thirsty.*

Steps

- Add watercolor to the jar of water. After filling the jar with room temperature water, have each student add some watercolor. They can use their straws to stir it.
- Insert a straw. Put the clay around the straw. Try to keep the straw in the center of the jar, standing as upright as possible. Mold the clay around the straw to hold it in place.
- Mark the level of the water. This is your thermometer. Using a permanent marker, draw a line around the straw at the top of the water level. This establishes a baseline for comparison.

4. Put the thermometer in the hot water and the ice water. What happened? Before they place their jar into either the hot or ice water, ask students to guess what will happen to their colored water. Carefully place the jar into the hot water. Observe the colored water. Remove the jar and carefully place it into the ice water. Observe the change in the colored water.