

Literature Vocabulary

- habitat
- desert
- animals
- energy
- food
- home
- plants
- sleep
- water

Math Vocabulary

- add
- join
- addition
- subtract
- separate
- subtraction
- strategy

Materials

- Bug counters – 10 per student
- **BLM** Desert Storyboard
- **BLM** Desert Story Strategies

Time Clue

BB = 2 minutes

CI = 24 minutes

AC = 1 minute

ELPS (*English Language Proficiency Standard*)
2C,2B,2D,2I,3G,3H,4C,4G,4J

CCRS

Math

IB.1, IC.1, VIIIA.1,2,3,4,5
VIIIB.1,2 VIIC.1 IX.A,1,2,3
IX.B.1,2 IX.C.1,2,3

Cross-Disciplinary

I.A.1,2 I.B.1,2,3 I.C.1,2,3
I.E.1,2

Unit 2, Lesson 1

Kinder



TV Lesson

Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.

Math Objectives:

- Add and subtract to solve a word problem.
- Explain your strategy for solving the word problem.

Language Objectives:

- Listen to the word problems.
- Speak: Tell your Classroom Teacher the math movie you see.
- Read the vocabulary words we will use.

Building Background, Math

TEACHER: What fun, boys and girls, you are learning about the **desert!** The desert is a very special **habitat**, with very special **plants** and **animals** that can live there. It's hot, it's cold, and there isn't much **water** -- it's very, very dry!

AZULITO: Oh, I have seen some very beautiful pictures of the desert. I'll bet all of those animals would have some very good stories to tell us if they could speak human language!

TEACHER: Yes, Azulito, I'll bet they would! Stories – that is just what we are going to tell today, Azulito. Stories! The boys and girls have a storyboard, and they have bug counters. We are going to make math stories today about their bugs in the desert.

We will be looking at some very important **ACTIONS** today, boys and girls. These actions will tell us whether we **JOIN** our bugs together, or whether we **SEPARATE** them apart. Each of you will use your own **STRATEGY** to solve the problem.

AZULITO: What is a strategy?

TEACHER: A strategy is the way that we use to solve a problem. We listen to the problem; we see a math movie in our mind to see the action in the movie, and then we make a plan and use a **STRATEGY** to solve the problem.

Unit 2, Lesson 1

Kinder



TV Lesson - continued

SMART Board

Display the Storyboard and impose the words as things are identified.

And we are going to use our storyboard to help us create our story problems. Let's look at the storyboard together.

You looked at the storyboard during your classroom lesson. Let's name some of the things we see so we can use those words in our stories. What do you see, Azulito? (*Show the Storyboard on the SMART board if possible – impose the names of things as you talk about them. You can highlight those areas when you use them in the story problems.*)

AZULITO: Oh, the first thing I see is that big prickly pear cactus right at the front of the picture. It has thorns that stick you if you get too close!

TEACHER: Yes, it does. Boys and girls, did you recognize the prickly pear cactus? We have a lot of that in South Texas!

And this bush that is on the right just above the cactus is a sage – it's called a bursage (pronounced "burr-sage.")

AZULITO: I can see the gritty dirt between the cactus and the bursage. It looks like a little path that goes into the brush behind the bursage.

TEACHER: Yes, I see that, too. We can call that our path! On the side of this bushy hill you can see lots of saguaro (pronounced sa-huar-o) cactus. They only grow in the Sonoran Desert.

AZULITO: And I see mountains in the background, and I see a beautiful blue sky.

TEACHER: Yes, this picture must have been taken in the mountains of the desert. That is why you see so many bushy plants close together. They get more rain up there than on the lower part of the desert.

Comprehensible Input, Math

Alright, we have lots of places now that we have identified for our different stories. Are you ready, boys and girls, to solve story problems?

Have your counters ready. Listen the first time I tell you the story. Look for the math movie in your mind. What are the bugs doing in our story? Do you have to join them or separate them? Let's get started.

Unit 2, Lesson 1

Kinder



TV Lesson - continued

Classroom Teachers

Circulate the room to make sure students are modeling the problem.

TV Teachers SMART Board

Be sure you are modeling on the smart board or with the storyboard and counters.

Listen to the story for the math movie:

There were four bugs climbing on the prickly pear cactus eating food. Three more bugs crawled up the cactus to eat food. How many bugs were on the cactus to eat food?

Get your bug counters ready. Where is this story on the story board? *(pause)* On the prickly pear cactus. Now listen to the story again, and model the math movie with your bug counters.

There were four bugs climbing on the prickly pear cactus eating food. Three more bugs crawled up the cactus to eat food. How many bugs were on the cactus to eat food? *(Pause for students to solve the problem.)*

I have three strategies for solving that problem. These are not the only strategies. You might have another one. *(Model each step.)*

There were four bugs climbing on the prickly pear cactus eating food. That means I need to have bugs on the cactus.

Three more bugs crawled up the cactus to eat food. Now # more bugs join them.

How many bugs were on the cactus to eat food?

- First I'm going to model the math move. The action in the story told me that we are joining two sets of bugs. I can count them all: 1, 2, 3, 4, 5, 6, 7. There are seven bugs on the cactus to eat food.
- I can also draw a picture of what I did. I'll let little dots be my bugs. Four bugs would be four dots, and three bugs would be three dots. The math movie showed me that the bugs are joining together on the cactus. Again, I can count: 1, 2, 3, 4, 5, 6, 7.
- Finally, I can use a number sentence as my strategy: $4 + 3 = 7$. *(Write the numbers under the appropriate part of your picture, i.e., the four under the four dots, then a + sign, then the three under the three dots and an equals sign seven.)*

Was your strategy different than my strategies? *(pause)* Show your teacher your strategy for solving this problem. *(longer pause)*

OK, we're going to work a few more. Then I have a record sheet for you so that you can also draw a picture and use a number sentence. But for right now, you can model. Be careful, though, because I can be tricky with my math movies!

Unit 2, Lesson 1

Kinder



TV Lesson - continued

Use the same process for all of the problems.

- Read the story for students to see the math movie in their minds.
- Read a second time for modeling.
- Debrief by showing:
 - a. Modeling
 - b. Pictures with dots
 - c. Number sentence that matches the picture drawn.

Let's move over to our path. Here is our path. This will be where our next story takes place.

(Follow the same format for this problem.)

Eight bugs were crawling in a row down the path. Five of the bugs skittered into the bursage. How many bugs were still on the path?

(Debrief in the same fashion.)

Let's climb up one of the mountains this time. You may choose any of these mountain peaks for your bugs to climb.

Nine bugs were walking up the mountain. Four more bugs flew in to walk up the mountain with them. How many bugs walked up the mountain?

Now let's go into the sky. Do you have insects that fly? If not, just find some and pretend.

Twelve bugs were flying in the blue sky. Nine of the bugs landed on the top of one of the mountains. How many bugs were still flying in the blue sky?

OK, now it is time for your teacher to hand you the second **BLM Desert Story Strategies**. We will first model with our bug counters on the story board. Then we will draw a picture in the problem box. Beneath the picture we will write a number sentence to match our picture.

Here is our first problem. We will use the top rectangle for two of our strategies. Remember, though, first reading you listen so you can see the math movie in your mind.

1. Nine bugs were at home and sleeping on the prickly pear cactus. Three bugs came to visit and sleep on the cactus. How many bugs were sleeping on the prickly pear cactus? *(Read a second time, then give students time to solve in the three ways; then debrief.)*
2. Ten bugs were climbing the mountain. Eight bugs got tired of climbing and flew into the blue sky. How many bugs were left climbing the mountain? *(same format)*

Unit 2, Lesson 1

Kinder



TV Lesson - continued

Classroom Teachers:

Please finish this assignment if the TV Teacher does not have time to do so.

Azulito's Corner

Tell us all the different strategies used today to solve your CGI problem. Share your class posters if you can.

3. Eleven bugs marched in a straight line up to the top of the saguaro cactus. Three bugs fell off. How many bugs were left marching up the saguaro cactus?
4. Thirteen bugs were getting energy by eating the bursage. Nine of them felt they had lots of energy and flew away. How many bugs were still eating to get energy?

AZULITO: Oh, that was fun! And you know, the students did something like this during their Daily Routines – they solved CGI problems. (*Explain the Azulito Corner Task.*)

TEACHER: Thank you, Azulito! It will be a lot of fun to see so many posters online! We'll be looking for your class to send in several copies!

During your Follow-up Lesson you are going to be creating word problems for the story board. We have practiced problems here, and you've seen how the problems can sound. You are going to make a book of your problems that you create during this unit. We'd love to see some of your problems online, too!

Objectives: And now before we go, let's review what we have learned today! (*do so*)





Distribute AFTER TV lesson has begun – TV Teacher will direct you to do so (one per student.)

My name is _____

1

2

3

4