

# **THE MYSTERY OF SANDY BOTTOM CREEK**

Dear Presenter,

This is a **STORY TELLING** activity for approximately 25 ten year olds. **YOU MUST PRACTICE** telling the story at home before you attempt to tell it during the water festival. When you “practice” the story at home, visualize 25 little bodies watching and listening to you. Plan when you will draw the student’s attention to the large illustrations and when your voice will command the students to look at you. Personalize the story, make it as interesting as you can.

As each new group of students arrive, find the classroom teacher, introduce yourself, and let the teacher know this is a great story with an activity that follows and you will need his/her assistance. If you do not ask for assistance, the teacher will assume that YOU are the expert and they are the observer! Plan when you will ask the teacher for assistance (like choosing which student will be a great dead eagle). **DO NOT** hesitate to call the teacher by name and politely ask for their assistance with ANY of your needs.

As each session begins, introduce yourself to the students. “Good morning, my name is... and I work for..., I am a..... or simply I am happy to be here today.” Then introduce the topic of this presentation. Each step of this presentation is explained in this packet. These are recommended guidelines and do not have to be followed exactly word for word. However, you may present this material just as written. Feel free to personalize the presentation to suit your personality.

Thank you for volunteering to tell the story of “The Mystery of Sandy Bottom Creek.” Have fun, enjoy yourself, and we hope you will consider volunteering again next year.

Big Sioux Water Festival

## **THE MYSTERY**

# **OF SANDY BOTTOM CREEK**

## **MATERIALS LIST:**

(FOR 6 SESSIONS WITH 24 STUDENTS PER SESSION)

### **CONSUMABLES**

- Water maze handouts for students
- Answer key for teachers
- Large Ziplock bags for storage of loose items

### **NON-CONSUMABLES**

- 9 white neck cards: 1 farmer, 8 raindrops
- 7 blue neck cards: 4 cattails, 1 mouse, 1 muskrat, 1 eagle
- 15 red neck cards: 8 shellfish, 4 minnows, 2 bass, 1 boy
- Minimum of 8 blue plastic paper clips
- Minimum of 16 red plastic paper clips
- 1 text folder with instructions, 10 story cards, and 2 activity cards
- 11 - 30" x 40" foam-core storyboards

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## **ROOM REQUIREMENTS**

- A large easel
- Large room for story telling and “moving” activity

## **PRE-PREPARATION**

- Check materials against material list
- Practice telling story
- Practice leading the student activities
- Become familiar with student activity supplies
- Make 180 copies of water maze student handout. Make 6 copies of teacher answer key

## **PREPARATION**

- Arrive early to the classroom
- Arrange room as necessary. A suggestion would be to remove chairs and have students sit on the floor during the story telling
- Set out and arrange supplies
- Set up easel and arrange storyboards

# **THE MYSTERY OF SANDY BOTTOM CREEK**

## **EDUCATIONAL INTENTIONS:**

- Introduction to bioaccumulation
- Discuss factors contributing to pollution of resources
- Basic knowledge of food chain

## **INTRODUCTIONS**

Have the students sit at desks or on the floor. It is important for every student to be able to see the illustrations. Introduce yourself, tell students they will be hearing the story: "The Mystery of Sandy Bottom Creek." Let students know the whole class will try to solve the mystery at the end of the story. You may wish to ask a student to help change the storyboards for you. This will allow you to walk around the room. Note: It is guaranteed the class will go to sleep if you stand in one place and read the story!

## **TELLING THE STORY**

The story, with miniatures of the storyboards, is added in this packet.

## **TITLE PAGE**

Draw students attention to pictures on title page. Point out areas of interest. Be sure to mention the name of the illustrator (Tanya Marsh, an 8<sup>th</sup> grade student from Brookings Middle School)

## **PAGE 1 - 10**

Use a narrator's voice. Read story from story cards. Point out some of the area's illustrated resources: trees, good planting soil, and WATER, etc. If you'd like, you can use slightly different vocal inflections to add emphasis to quotes and action.

## **PAGE 5**

Note: This page introduces the word "pesticide." Students may not know the meaning of this word. Take a couple seconds to ask students for ideas. If no one answers correctly, explain that pesticide is a chemical placed on plants to help kill unwanted or destructive insects.

## **PAGE 10**

Note: This is a map that will help students visualize a summation of the story. Leave this board up throughout the remaining activities.

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## **STUDENT ACTIVITIES**

The following two activities will be lead and directed by you. Remember you are still telling the story. You will need to explain how each of the steps could happen. Some guidelines are provided as recommendations.

- Keep an eye on the clock. These activities can be very time consuming. Students will tend to want to have discussions about the neck cards, their roles, the paper clips, etc.
- Do not allow students to switch cards.
- Designate an area of the room for the activity. Somewhere that you can form a large circle works best.
- It is important that all students participate in an activity. Depending on class size, you may have to include the teacher, any other volunteers and yourself as characters in the story. If the class size is large, you may want to use 16 students for the first activity, then assign the remaining 8 students specific parts in Activity 2.
- Both activities are written on Activity Cards for easier use.
- Both activities are about bioaccumulation. Make sure you spend a couple minutes explaining how pesticides can become more and more a part of the food chain, resulting in many animals, including humans, getting sick and in some cases (such as the eagle in our story) dying. Introduction of the definition of bioaccumulation should be at the end of Activity 1. Reiterate after Activity 2 and in further topic discussions.

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## **ACTIVITY 1**

- Give one white neck card to 9 students: 8 raindrops and 1 farmer
- Give one blue neck card to 7 students: 4 cattails, 1 mouse, 1 muskrat and 1 eagle (ask the teacher prior to the story telling which student you should choose to play the role of the dying eagle)
- Give farmer 8 blue plastic paper clips representing pesticide (state the meaning of the word pesticide again) that he/she uses on their crops
- Ask farmer to carefully distribute (sprinkle) pesticide over the land.
- Each raindrop picks up one paper clip. Rain dissolves pesticide and carries it to the marsh
- 4 cattails “drink” 2 raindrops and now each have 2 paper clips
- Mouse “eats” one cattail and muskrat “eats” 3 cattails. Each will take paper clips from cattails
- Eagle SWOOPS down and “eats” mouse. Eagle is still hungry, however, so it SWOOPS down and “eats” muskrat. Eagle collects all 8 paper clips from mouse and muskrat. Eagle begins to fill ill and then dies
- Take a few minutes to introduce and discuss bioaccumulation
- Collect all white and blue cards along with 8 blue paper clips
- Explain the eagle mystery. Eagle ate 2 animals from King’s Folly Marsh - two animals that were loaded with pesticide. The Eagle-death mystery is solved. By what about the boy? Remember the boy had never visited Cedarville or King’s Folly Marsh

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## **ACTIVITY 2**

- Include any students who were not involved in Activity 1
- Give one white neck card to 9 students: 8 raindrops and 1 farmer
- Give one red neck card to each remaining student. If there are not enough students, some of the white card students who were not involved in Activity 1 can also have a red card as long as it is not a shellfish card
- Give farmer 16 red paper clips representing pesticide (review one more time the meaning of the word pesticide) he/she uses on crops
- Ask farmer to carefully distribute (sprinkle) pesticide over the land.
- Each raindrop picks up two paper clips. Rain dissolves the pesticide and carries it to the marsh
- At the marsh, each shellfish “filter feeds” from water picking up 2 paper clips
- Also at the marsh, each minnow “eats” 2 shellfish (gaining 4 paper clips each)
- Minnows swim to Johnstown River
- Each bass “eats” 2 minnows, collecting 8 paper clips each
- Boy goes fishing and catches both bass for supper (collecting all 16 paper clips). Boy eats the bass for dinner and gets sick
- Reiterate the meaning of bioaccumulation - at this point, most students will have solved the mystery and are excited about talking with you and each other about it.
- Collect all white and red neck cards and red paper clips
- Lead a short discussion about “The Mystery of Sandy Bottom Creek.” Make sure to have students brainstorm ideas about how they would correct the problems that happened in Cedarville. All ideas should be given consideration and a lively discussion should occur

## **FINALLY**

- Hand out water maze handouts and teacher answer key to the classroom teacher.
- Thank the children for attending your session, compliment them on their behavior and their ideas.
- Arrange storyboards for next session. Arrange supplies for next session

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## **FINAL CLEAN UP AFTER LAST SESSION Approximately 15 minutes**

- Place storyboards into large storage box
- Place protective board on top of storyboards
- Replace all story, cue and activity cards into folder
- Replace all paper clips into their respective Ziplock bags
- Replace neck card into their respective Ziplock bags for storage
- Place all Ziplocks and the presenter kit instruction folder into large storage box