## Our Worm Study

BY: MISS DEVIN AND MISS SOMAR'S PRESCHOOL FOR ALL CLASS OF 2011

Our journey began with the delivery of our red wigglers. We were awarded a vermicomposting grant, though Joliet/Will County Project Pride, which included one compost bin, 1 lb. red wigglers and a vermicomposting book.



### Worm Introduction

After introducing the worms and their new home to the children we made a list of questions that the children had about worms. Through our explorations and books we were able to answer all of their questions by the end of the project. We also added a new job to our job board. Our worm sprayer sprayed water on the worm bedding to make sure it stays moist.

### What do we want to learn about worms? How do you hold worms? Denise \*How do worms dig into the dirt? Brianne 6., Mia \*How do they wiggle? - Tyler How do they not have hands? Zeyda, Brianna W. Do worms talk? John Do they sleep? Chase, Travis How long do they live? Miss Somar Do they live in the forest? Gracie How do they sleep? Briana N. How do they climb? Piper How do they make rests? Mia Do worms ever have eggs? Gracie

To set up our bin, the children used their fine motor skills as they tore strips of newspaper and soaked them in water. This became the bedding for the worms.





For a wormy snack the children made dirt pudding. They helped make the pudding, crushed their Oreos, mixed them together and added gummy worms.





Although some of the children were first afraid of the worms, they quickly warmed up to them and even requested to hold them.





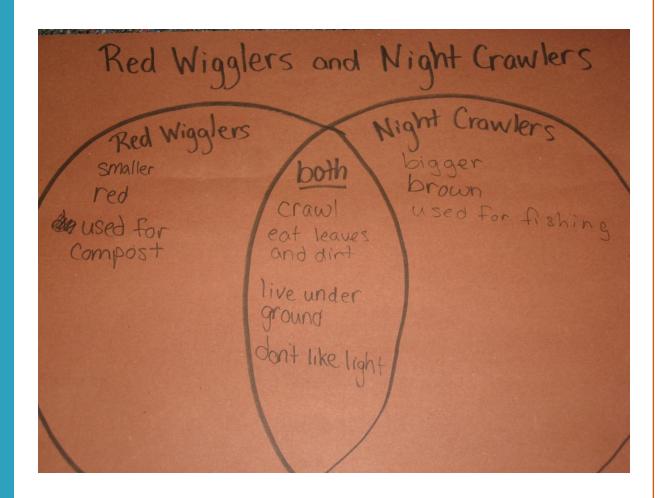
We then brought in night crawlers to let the children compare them to the red wigglers. The children made observations as they looked at and touched them.





### Red Wigglers VS. Night Crawlers

After spending the day with our night crawlers, the children made a Venn Diagram to compare the two types of worms.



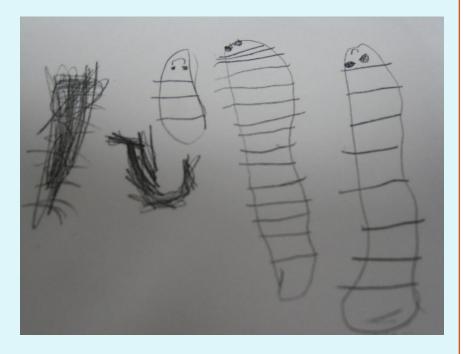
# During small group the children did observational drawings of the worms.





### **Observational Drawings of Worms**





We added worm materials to many of our learning centers. We observed many of the children engaged in their own worm activities.

We observed one child making his own worms from play dough in the art center.

This child sorted rubber fishing worms.





Music: We sang "Ten Wiggle Worms" and learned worm finger plays.

Library: We read several books about worms and added them to our library.

Discovery: Our worm bin is in our discovery center, as well as magnifying glasses, rulers, nonfiction worm books and rubber fishing worms.

Sensory Table: dirt with rubber fishing worms.

Computer: We searched the web for pictures of worms that live in the ocean.

Math: Sorting and measuring with measuring worms and rubber fishing worms.

Gross-Motor: We played "Worm, worm, red wiggler."

Writing: In their journals, the children wrote about why worms are important.



Our project expanded into many of our learning centers...

The children also used the rubber fishing worms for painting. As they painted with them they noticed the different textures of the worms.





For another snack, the children took pieces of canned biscuits and rolled them to look like worms, before baking them.





Our last worm snack was spaghetti noodles with butter and parmesan cheese.



At the end of our project we did a web to record everything that we have learned about worms. Not only did the children learn a lot about worms and composting, they also became more comfortable with them and other insects. The children really enjoyed finding foods that were safe for the worms to eat and feeding it to them. They also enjoyed finding baby worms and watching the changes in our bin as our newspaper and food turned to compost.



#### What the children learned...

## Illinois Early Learning Standards Addressed in our Project

1.A.ECA: UNDERSTAND THAT PICTURES AND SYMBOLS HAVE MEANING AND THAT PRINT CARRIES A MESSAGE.

1.A.ECB: UNDERSTAND THAT READING PROGRESSES FROM LEFT TO RIGHT AND TOP TO BOTTOM.

1.A.ECD: IDENTIFY SOME LETTERS, INCLUDING THOSE IN OWN NAME.

1.B.ECA: PREDICT WHAT WILL HAPPEN NEXT USING PICTURES AND CONTENT FOR GUIDES.

1.C.ECA: RETELL INFORMATION FROM A STORY.
1.C.ECB: RESPOND TO SIMPLE QUESTIONS ABOUT READING MATERIAL.

1.C.ECC: DEMONSTRATE UNDERSTANDING OF LITERAL MEANING OF STORIES BY MAKING COMMENTS.

2.A.EC: UNDERSTAND THAT DIFFERENT TEXT FORMS, SUCH AS MAGAZINES, NOTES, LISTS, LETTERS, AND STORY BOOKS, ARE USED FOR DIFFERENT PURPOSES.

2.B.EC: SHOW INDEPENDENT INTEREST IN READING-RELATED ACTIVITIES.

3.A.EC: USE SCRIBBLES, APPROXIMATIONS OF LETTERS, OR KNOWN LETTERS TO REPRESENT WRITTEN LANGUAGE.

3.B.EC: DICTATE STORIES AND EXPERIENCES.
3.C.EC: USE DRAWING SKILLS TO CONVEY MEANING AND INFORMATION.

4.A.EC: LISTEN WITH UNDERSTANDING AND RESPOND TO DIRECTIONS AND CONVERSATIONS.

4.B.EC: COMMUNICATE NEEDS, IDEAS AND THOUGHTS.

5.A.EC: SEEK ANSWERS TO QUESTIONS THROUGH ACTIVE EXPLORATION.

5.B.EC: RELATE PRIOR KNOWLEDGE TO NEW INFORMATION

5.C.EC: COMMUNICATE INFORMATION WITH OTHERS.

6.A.ECA: USE CONCEPTS THAT INCLUDE NUMBER RECOGNITION, COUNTING AND ONE-TO-ONE CORRESPONDENCE.

6.A.ECB: COUNT WITH UNDERSTANDING AND RECOGNIZE "HOW MANY" IN SETS OF OBJECTS.

7.A.ECA: DEMONSTRATE A BEGINNING UNDERSTANDING OF MEASUREMENT USING NON-STANDARD UNITS AND MEASUREMENT WORDS.
7.B.EC: SHOW UNDERSTANDING OF AND USE COMPARATIVE WORDS.

7.C.EC: INCORPORATE ESTIMATING AND MEASURING ACTIVITIES INTO PLAY.

8.A.EC: SORT AND CLASSIFY OBJECTS BY A VARIETY OF PROPERTIES.

8.D.EC: DESCRIBE QUALITATIVE CHANGE, SUCH AS MEASURING TO SEE WHO IS GROWING TALLER.
9.B.EC:FIND AND NAME LOCATIONS WITH SIMPLE WORDS, SUCH AS "NEAR."

10.A.ECA: REPRESENT DATA USING CONCRETE OBJECTS, PICTURES, AND GRAPHS.

## Illinois Early Learning Standards Addressed in our Project

11.A.ECA: USES SENSES TO EXPLORE AND OBSERVE 20.B.EC: EXHIBIT INCREASED ENDURANCE. MATERIALS AND NATURAL PHENOMENA.

11.A.ECB: COLLECT, DESCRIBE AND RECORD INFORMATION.

11.B.ECA: USES SCIENTIFIC TOOLS SUCH AS THERMOMETERS, BALANCE SCALES AND MAGNIFYING GLÁSSES FOR INVESTIGATION.

12.A.ECA:INVESTIGATE AND CATEGORIZE LIVING THINGS IN THE ENVIRONMENT.

12.B.EC: DESCRIBE AND COMPARE BASIC NEEDS OF ACTIVITIES. LIVING THINGS.

12.C.EC: MAKE COMPARISONS AMONG OBJECTS THAT HAVE BEEN OBSERVED.

12.E.ECB: PARTICIPATE IN RECYCLING IN THEIR ENVIRONMENT.

13.B.ECA: EXPRESS WONDER AND ASK QUESTIONS ABOUT THEIR WORLD.

16.A.EC: RECALL INFORMATION ABOUT THE IMMEDIATE PAST.

19.A.ECA: ENGAGE IN ACTIVE PLAY USING GROSS MOTOR SKILLS.

19.A.ECB: ENGAGE IN ACTIVE PLAY USING FINE MORE SKILLS.

19.B.EC: COORDINATE MOVEMENTS TO PERFORM COMPLEX TASKS.

19.C.EC:FOLLOW SIMPLE SAFETY RULES WHILE PARTICIPATING IN ACTIVITIES.

20.A.EC:PARTICIPATE IN DEVELOPMENTAL ACTIVITIES RELATED TO PHYSICAL FITNESS.

21.A.EC: FOLLOW RULES AND PROCEDURES WHEN PARTICIPATING IN GROUP PHYSICAL ACTIVITIES.

25.A.ECD: VISUAL ARTS: INVESTIGATE THE ELEMENTS OF VISUAL ARTS.

25.B.EC: DESCRIBE OR RESPOND TO THEIR OWN CREATIVE WORK OR THE CREATIVE WORK OF OTHERS.

26.A.ECA: DANCE: PARTICIPATE IN DANCE

26.A.ECB: DRAMA: PARTICIPATE IN DRAMA ACTIVITIES.

26.A.ECC: MUSIC: PARTICIPATE IN MUSIC ACTIVITIES.

26.A.ECD: VISUAL ARTS: PARTICIPATE IN THE VISUAL ARTS.

26.B.EC: USE CREATIVE ARTS AS AN AVENUE FOR SELF-EXPRESSION.

31.A.ECB: EXHIBIT EAGERNESS AND CURIOSITY AS A LEARNER.

32.A.ECA: BEGIN TO UNDERSTAND AND FOLLOW RULES.

32.A.ECD: USE THE CLASSROOM ENVIRONMENT PURPOSEFULLY AND RESPECTFULLY.

32.B.ECA: ENGAGE IN COOPERATIVE GROUP PLAY.