

# Stuffed Toy Critters: Introduction to Databases

## Objectives:

- Students will collect information.
- Students will understand that the information collected can be used to describe or classify.
- Students will practice sorting by attributes.
- Students will be introduced to using a database to sort information.

## EALRs addressed:

- 5.1.2 Students use technology to organize information
- 5.2 Students effectively transform acquired information into a useful format.
- 6.0 Students use technology resources for problem solving, developing strategies, and making useful decisions.

## Materials Needed:

- “Stuffed Toy Critters” AppleWorks Database Template loaded on teaching station computer.
- “Stuffed Toy Critters Data Collection Sheet”
- 1 stuffed animal per student.
  - Option 1: Students bring their own from home
  - Option 2: Teacher provides a “Beanie Baby” type stuffed toy for each student.
- The advantage to using Beanie Babies™ is that they have both the name and date of birth on the tag – information that will be recorded.
- 2 postage-type scales (or food measuring/portion scales) – needs to be able to record ounces.
- 4 or 5 soft (sewing-type) measuring tapes. Hard rulers will work; but then will need string lengths to wrap around the toy & then record measurement.

## Procedures:

### Session One

1. Be sure students have an animal to use.
2. Have students pair up & give each pair one copy of the Stuffed Toy Critters Data Collection Sheet. Explain that they will work with their partner and fill in all the blanks on the page. Spread out the scales and measuring tapes and facilitates everyone using them to record the data about their animal.
3. After the information is filled in – collect the tools and explain that in the blanks they filled in information about the animal and that this information could be called descriptions, or characteristics, or attributes of their toys. Ask them how many had a “red” animal, or a “brown” animal (just with a hand raise).
4. Now ask them to get up and sort themselves by their animal’s color. Direct them to start with white to your right and then make a line around the room of pink, red, orange, yellow, green, blue, purple, gray, black and “multi” (if necessary). Be sure to have them get out of their seats to do this (important!). While sorting,

answer any questions that come up (“What color is this?” “It’s both black and white”, etc.) You make the call on these.

5. Now ask for other ways they might sort their animals by an attribute. If you can, list them on the board or overhead. Pick one (number of legs, type of animal, smallest to largest are all good ones – having a little ambiguity is good). Have them arrange themselves by that attribute, BUT you don’t tell them how to line themselves up – let them figure it out. If questions arise, tell them to work it out with the group.
6. Ask them what their process was (it may have been very simple depending on what the chosen characteristics was). How did they decide where to stand? If time and inclination, do one or two more sorts by other attributes.
7. After returning to their seats, show them the “Stuffed Toy Critter” database. Show them the new record screen and how it directly lines up with the data collection form. Working in pairs, the students will enter the data for their animals. You demonstrate with 1 animal and create a new record. Quickly make a list of the pairs of students to have next to the computer, so students can check off their names after they have entered their data. The buddy helps check spelling and makes sure the data is in the right field, etc. Make sure each group saves their work (Cmd/Save or Control/Save). This is the end of the activity for this session. Before the next session, the pairs will need to have entered the data. Show one student how to do it, then that student works with his/her team member and one of them shows the next team and so on until all teams have their information entered.

### **Session Two**

8. Before beginning this session, check the finished database. If there are any empty records in it, delete them.
9. Remind students how they needed to sort their animals (what decisions they needed to make, how long it took, a lot of small sorting going on (talking to your neighbor to make sure you were in the right place, etc.).
10. Launch the Stuffed Toy Critters database. Demonstrate how easy it is to sort the information when it is in electronic form – largest to smallest, color, alphabetical by name, all animals of a certain type, etc.\* Ask students to think of other “items” they could use for a database (our classmates, countries, states, plants, insects – and other topics of study.) If time, list attributes that might be recorded.
11. Discuss what a database is. A database is a way to navigate through information. Ask the students if they can think of databases they might use everyday. Some examples are: address books, phone books, library catalog, Google & other Internet search engines.
12. Launch the Library Catalog on the teaching station (<http://sagebrush.tacoma.k12.wa.us>) & click on your school’s catalog. Hold up a book – ask students what are some of the attributes or descriptors that help us identify this book? (Looking for title, author, or subject - *what the book is about*). Have students think about particular books they like to read or hear read aloud. Go to the Quick Search tab in the catalog and type in the author’s last name. Is that book in the school’s library? Now try a new search and put in a

subject. Students can use the Library Catalog (or database) to help them locate books in the library. The librarian can help them when they next go to the library.

Notes for the teacher:

This one lesson incorporates nearly all of the multiple intelligences:

Visual/Spatial (toys)

Logical/Mathematical (measuring)

Natural (classifying the animals)

Interpersonal (students had to decide for themselves how to arrange themselves)

Intrapersonal & Bodily-Kinesthetic (how they physically arranged themselves by attribute)

Linguistic (would need to use the second data collection sheet, “Stuffed Toy Critters Story Starter Words” – to use information they fill in about their animals as story ideas.)

The only one not specifically addressed is the musical intelligence, but surely someone will figure out a way to add that!

- Steps for Organizing & Sorting Records
  - Go to **Layout**: select *List*
  - Go to **Organize**: select *Sort Records*
  - Choose a field or category
  - Click “move”
  - Click “OK”
  - Repeat with other categories (Click “clear” before a new sort)
  - Can do two sorts at a time; color and length or age, etc.