

Math Activities Using Kid Pix

Counting

Counting Small Numbers - Use the shift, option and control keys to enlarge the stamps. Stamp several onto the page and count as you go. Use the number stamps to stamp a number on each object on the screen. Teddy Bears work really well. At largest size, their bellies are just the right size for a number.

Counting in Tens - Use the star paintbrush to paint a large number of stars onto the screen. Select the pencil tool and a color, and then have the students tick off 10 of the stars together. Draw a loop around the group of 10. Repeat this with a different color until all possible groups of 10 have been made. The fill tool can be used to further highlight the different groups. Use the number and alphabet stamps to write how many tens and how many ones are left, then the actual number. You can make some wonderful number charts using this technique. The other stamps can be used instead of the paintbrush tool.

Sorting/Classifying

· This idea is credited to Dorothy Laufer. She writes: "One of the activities I like to do with KIDPIX is to have the students use the moving truck (they have to use size judgements for this) to move graphics around so that they are classifying, placing all the small things together, placing a picture that goes with another picture or word...etc."

Operations

· Slide Shows - We did an addition of 2 and 3 fish, making them swim together to make 5 fish. You can use the same idea to make a counting slideshow. Perhaps I'll get around to putting one up soon. (NB: you need Kid Pix Companion or Kid Pix Studio for this one).

Math Activities Using Kid Pix

· Line Maze - It is pretty simple to create a maze, and it is a great idea for hand-eye coordination. Use the line tool to draw borders, identify a starting point (e.g. bike stamp) and a finishing point (e.g. the house stamp), and have the child use a pencil to draw the path through the maze.

Informal Maze -

· For an easier activity along the line of the above, just stamp a few trees in the middle of the screen and have the students draw a line from the starting point to the finishing point without touching the screen. If the above mazes are all too hard, simply stamp a starting and finishing point on the screen and don't worry about obstacles.

· Depending on which letter we were working on....I'd set up a graphic that started with that letter and have the kids paint it....they could also stamp, write, or type the beginning sound and/or word.

· You can take the letter you are working on and have the kids write, type or stamp it and then find stamps that begin with the same sound and have them stamp those pictures. You can make a nice alphabet slideshow this way.

Numbers....

· stamp numbers and next to them stamp the correct number of one of the stamps.....or make 5 circles using the circle tool.....,We made a spring counting book using the slideshow option. First we listed spring things....I wrote them on a chart and drew a small picture next to them.....then each child picked a number (numbers 1-20) and first on paper they wrote their number then the number word...then they picked a spring thing and drew that many...after their plan on paper was complete they went to the computer and recreated it on the computer.....we recorded their pages and made a slide show complete with applause and all their names on the last page.

Addition practice..

· tell students a number sentence....or have them written on cards.....and the student has to illustrate it using kid pix.....example number sentence is $2 + 3 = 5$ and the student may stamp 2 suns and then 3 more and then stamp a 5....you can also tell a story and have them represent it and then figure out and write the number sentence....this activity works great if you have a lab.....

we made a Spring counting book using the slideshow.....First we made a list of spring things.....birds...tulips.....bees.....buds.....ants.....sun.....clouds..
...raindrops....etc....then each child picked a number from 1-20....Then they planned out their page using paper, pencil and crayons.....they wrote their number then the number word and then the spring object they chose.....example 1 one sun then they drew a sun.....when their paper was finished and edited they went to KidPix and wrote their number with the pencil tool...then used the typewriter to type the number word and spring thing....then they used whatever tools they needed to draw. I encouraged them to make them as colorful as possible since it would be on a slideshow...not printed out....then I saved them and put them all into the slideshow and then I recorded their voice saying "one sun".....and they picked the transition....we still need to make a cover....and on the last page we put "The end! and everyone typed their name!

Graphics-

· you can import graphics from other programs. Just copy them onto theClipboard. When in KidPix, go to Edit and Paste. You could also import photographs from programs/scanners.

Changing Stamp Sizes-

· There are four sizes to stamps. The smallest is the regular stamp. Then, if you push the "Option" key it gets bigger. If you press the "Shift" key, it gets bigger, and if you press "Option" and "Shift" at the same time, it gets even bigger.

· **Editing Stamps-** If you double click on a stamp, it will take you to the Stamp Editor. You can use it to make new stamps. In addition, you can always go back to the original stamp.

Maze

· You first fill in the entire screen, with a solid color. Then the children pick out two stamps that were related. Perhaps the sun and the moon. Santa and a gift. They placed those on opposite sides of the screen. Next they used the line tool, made it the widest width, and holding down the shift key so the lines were straight, they made the path from the first stamp to the second. Of course, you would make it with many right

angles and all over the screen so it wasn't automatic. After they had the path completed, they went back to their 90 degree angles and made many other paths for confusion. They never overlapped paths. When these were finished we printed them, laminated them, and bound them into a book. Now we have a book of mazes that the children use grease pens on to solve each other's maze. With a quick wipe of a Baby Wipe they are ready for the next person.

Skills: mouse skills, directional, software knowledge

· Math Objective For students to understand the concept of greater than and less than with numbers 1-20.

Note: The numbers used for this lesson can be altered to meet the ability level of students.

Materials

· Index cards, Kid Pix, or other beginning paint/draw program, computer, printer/printer paper

Procedures

1. Have students write two numbers (1-20) on a card. Collect the cards, shuffle them, and then pass them out to each student.

2. Have the students write the less than or greater than sign in-between the numbers on their cards.

3. Open Kid Pix or other paint/draw program.

4. Each student will then create a picture in Kid Pix which illustrates the relationship of the two numbers. For example, on a card with the numbers and 17 and 19, students would use the stamps or draw tool to write the numbers, place the correct number sign, < or >, between them, and then use the stamps or draw original art to place the correct number of items under each number. Encourage them to decorate their math problem thematically

5. Save their designs and print them out for a classroom display.

· Additional ideas:

1. To show big, bigger, biggest (sizing the stamps)

2. symmetry (use symmetrical caterpillar option under Wacky Brush Tool)

3. To show geometric shapes

4. To show patterns (make a quilt)

5. To graph (bar graphs, pictograms, line graphs)

5. Have teacher use it as a Show Me Tool (e.g. Show me you understand 10% of 50, Show me what 0.5 L of Coke looks like, Show me a picture for this equation etc.)

6. Use the Wacky Brush Option (dominoes tool) to play some of the games from Box Cars and One Eyed Jacks or create your own game with them.

7. Create templates that your kids can use for math puzzles. You could have 24 disks with 24 different math challenges. The students solve and then go on to the next one. An idea might be to get an older buddy to create a simple math challenge for a younger buddy.

Math Story Problems

As students work through this activity, they are talking and visualizing math as well as planning ahead, identifying the important information and breaking the problem down into smaller steps.

Place students in groups of two. Have each group create a math story problem about a situation that would interest their age group. Then have each group visualize how the problem would look if it were explained and solved using pictures.

The students should storyboard their story problems by sketching the illustrations and indicating what they will say for each illustration. Next have them draw these pictures using Kid Pix and create a slide show with voice overlay using Kid Pix Companion.

Geometric Shapes

Arrange students into groups of two and assign each group a different geometric shape (such as square, rectangle, circle, equilateral triangle, pentagon, hexagon, etc.). Tell each group that it is responsible for designing a short tutorial about its assigned geometric shape. by using pictures, written text, and voice overlay. These slide shows will be used as tutorials or next year's math students.

Students must:

- a. Write a statement that describes the properties of their assigned shape.
Example -- A square is quadrilateral with sides of equal length.
A square has four right angles and two pairs of parallel sides.
- b. Draw and label their assigned shape.
- c. Write a statement describing how they would find the perimeter for their assigned shape. exp.--To find the perimeter of a square, multiply the length of one side of the square by 4.
- d. Draw and label a figure that illustrates how one would find the perimeter for their assigned shape. Example -- Perimeter of a Square = length of one side * 4 The perimeter of this square is 2×4 or 8 units of length.
- e. Write a statement describing how they would find the area for their assigned shape.
Example -- To find the area of a square, square the length of a side.
- f. Draw and label a figure that illustrates how one would find the area for their assigned shape. Example -- Area of a Square = (length) ². The area of this square is 2×2 or 4 square units of area.
- g. Storyboard this information indicating what will be drawn on each frame, what text will be printed on each frame and what voice overlay will accompany each frame.

Book Reports

Procedures

1. Read a story/novel to your class, or have students use a book they've read themselves. This works well using a story from your Reading book.
2. Have each student use the word processor in Kid Pix to write the title of the story, a brief summary-just a few sentences, and their name somewhere on the page.
3. Have each student illustrate the story using either stamps, original art, or a combination of both.
4. Print the pictures out to share with classmates.

Extension: You can place your students' pictures in Kid Pix Slide Show. This makes a great presentation to share with parents at Open House or Parent Days. These slide shows are also wonderful when transferred to videotape, especially for sharing school-wide in schools with closed circuit television systems.

Alternate Activity: Have students illustrate the story in Kid Pix. A word processor can be used to write a more detailed summary or book report. Import the Kid Pix illustration into the word processing document. List Making Use the stamps from Kid Pix 2 to make a list of theme words. eg Toys, food, transport etc. Children make up own lists. Write words next to each stamp.

Partners.

Alphabetical Order Use ABC Alphabetical Text function to create shapes in alphabetical order in Kid Pix 2.

Compound Words Use stamps and text to make and draw compound words from Reading books. eg car + port = carport.

Each child chooses a favorite book and creates a picture that went along with the book. Next they write what their favorite books were and why they liked them

Random Ideas:

Use the stamps:

- 1.to create number stories.
- 2.to make a border for a picture or your writing to make rebus stories (using simple sentences typed by the teacher, find a stamp that can go in the blank)
- 3.match the stamp picture with a word (this is a pre-made file which the teacher has to create.
4. With a partner: one partner chooses two different stamps and makes two sets. The other person must use the alphabet stamps (numbers) to show the addition sentence. This process could also be reversed. The teacher could also control this if certain addition facts were written on a slip of paper, students pick one and create the picture and the addition sentence on the screen then print it out. This could be used to create a book about addition facts for your classroom.
- 5.Make a map
- 6.Draw self portraits. If you had them do one at the beginning of the year and one at the end it would probably be interesting to compare.