



Time Required

One 45-minute period



Materials Needed

- Open space indoor or outside Download, print and cut “machines to pantomime” sheet. Fold small pieces of paper and place in bowl or bag so each team can pick out their machine

Activity Objective

This activity promotes imaginative thinking and creating a unique simulation of imaginary machines. Students experience inventing the moving parts of a machine through simulation and play acting and invent using their body kinesthetic senses

What To Do

Ask the students to guess what you are doing. Model the sounds and motions of a machine. For example, you can turn around back and forth while saying “swoosh- swoosh” and be a washing machine.

If you want the kids to feel comfortable doing something silly, you have to model a little!

Once the students understand the concept, pair them into groups and have them play a charades-like version of making machines. Have each group pick a machine and quietly work together to make a machine. Other teams watch each pantomime and guess. When the children have finished this activity, ask them to invent their own machines.

Finally, have each child begin to make a big make-believe machine by standing in the middle of open area and making machine sounds and/or movements. The next child comes and joins making complementary sounds. The students must be touching somewhere for part of the time. The next child comes up and adds to the “big” machine until everyone is attached to the machine.

Extension

Video tape this experience and play back so the kids can see themselves.

Have the class research machines on the Internet and print pictures. Have them act out the machines they find.



Time Required

Two 45-minute periods



Materials Needed

- Magazines that include pictures of food such as Woman's Day, Family Circle, and Good Housekeeping.

For cutting: scissors, glue stick, and magic markers.

Activity Objective

To encourage creative thinking and practice inventive thinking by using everyday activities as inspiration.

Preparations

Each group will need 3 sheets:

Breakfast Group:

Sheet 1: Things we like about breakfast

Sheet 2: Things we don't like about Breakfast: Breakfast Challenges

Sheet 3: Things we could do to make Breakfast better!

Lunch Bunch:

Sheet 1: Things we like about lunch

Sheet 2: Things we don't like about lunch: Lunch Challenges

Sheet 3: Things we could do to make Lunch better!

Dinner Crowd:

Sheet 1: Things we like about dinner

Sheet 2: Things we don't like about dinner: Dinner Challenges

Sheet 3: Things we could do to make Dinner better!

What To Do

The teacher should do the following:

First Session:

Divide class into three groups. Each group will need a facilitator, a recorder and a timekeeper.

Jobs:

Facilitator - leads the discussion and keeps the group on track.

Recorder - writes the thoughts of the group down

Timekeeper - makes sure the group gets their job done on time.

Note: If your students are already experienced with cooperative learning in a group, they should not need much more direction than a reminder of appropriate behavior, respect for each other and keeping the noise down so each group can hear.

Name the groups: the breakfast group, the lunch bunch, and the dinner crowd. Each group spends 5-10 minutes cutting pictures of their group's assigned meal and pasting them in the middle of the two newsprint sheets they have been given.

Explain that they will be thinking about things that are right and "wrong" / good and "bad" about breakfast, lunch and dinner. These things could be about food. Solicit some other ideas like "not enough time to eat" or same old routines and foods, etc.

Distribute Sheets #1 and #2. After the students paste the pictures in the middle of the page, guide the students in using a mind mapping technique to make "bubbles" (written circles) around the page and place ideas from the group in each bubble. Complete the sheet about things they like first and give each timekeeper a reminder to move to the next sheet. Make the same bubble circles and have them fill these circles with things they don't like.



Time Required

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Materials Needed

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What To Do continued

With about 10 minutes left in the period, have each group roll up their sheets until the next day. Ask for one thing liked and one thing disliked from each group.

Tell the students their homework is to pay attention during their next meal to what they like and don't like and write up three things they didn't think of during the activity.

The Next Day:

Day 2 or 2nd 45 minute session

Teacher has students review their first two sheets and make connections between the bubbles. Circulate among the groups adding comments to stimulate their thinking. They should discuss their three new ideas from the homework assignment.

Then, give out Sheet #3 for each group (Things to do to improve Breakfast/Lunch/Dinner)

Each group must pick one thing to improve from their list. Together they invent a "solution" to make that meal better.

These are presented to the whole class in the last 15 minutes.

For homework: Each student must pick one challenge from the meal of their choice, describe the problem and pose an invention or solution to this problem. They must follow the attached form.

Extension

Video tape this experience and play back so the kids can see themselves.

Have the class research machines on the Internet and print pictures.
Have them act out the machines they find.



Time Required

Two 45-minute periods



Materials Needed

- Copies of the school schedule (1 for each student)

Copies of a blank schedule with school hours (1 for each student)

Activity Objective

To teach children how to better manage their time, to reinvent the school schedule, and to practice inventing with a familiar subject.

What To Do

First Session: The teacher should break class into four groups (groups should be as equal as possible). Next the teacher is to give each student a copy of the actual school schedule and a copy of the blank schedule with the school hours included. The teacher should then instruct students to use the blank sheet to invent a new school schedule that they would consider better than the present schedule.

Second Session: The teacher should have groups write a presentation about their new schedule and why they think this new schedule would be better. Lastly, the groups should then present their schedule to the class with their rationale.

Extension

Students could use PowerPoint to make a multimedia presentation to the class. The best group can make an appointment to present to school administration or school leadership council.

Language Arts
NL-ENG.K-12.11

Standards - Technology
PPT Nt.K-12.4.2
NTK-12.6



Time Required
20-minute period



Materials Needed

- Paper, magic markers, downloaded sheet or have them draw 8 large figure eights around a sheet of paper.

Activity Objective

This activity requires two students to work together on seeing a familiar shape and making it into other things.

Students will use the figure eight to create simple pictures.

What To Do

Demonstrate on the board by drawing a figure eight and then make the eight into something. It could be a bow tie on a clown or wings on an angel. Try to demo only one drawing using the eight.

Then divide class into pairs with one sheet of 8 figure eights between them. Their job is to take turns making something out of each figure eight.

Circulate around the room, encouraging and stimulating thinking.

When sheets are filled, have the kids share the ideas they came up with.

Extension

Use this activity with other numbers. Try number 3 or number 9 and see what items are drawn. Display the products in the classroom to reinforce the creative thinking process of substitution.



Time Required
30-minute period



Materials Needed

- Markers, crayons and drawing paper.

Activity Objective

This activity is an exercise in free association and in helping children see real things in abstract symbols. This is a good preparatory experience for logo making for a real “product”. Graphics are an increasingly important means of communication in the digital world and playing with shapes and forms precedes creating an abstract representation for a concept or product.

What To Do

Have all the students sit comfortably at desks or tables. Have magic markers and paper ready in front of each student. Ask the students to watch you as you make some shapes with your hand. Make small swirls and circles in the air with an imaginary marker.

Now ask the students to do the same thing. Have them use an imaginary marker in the air and draw “doodles” (curvy lines and circles).

Now request that they draw a doodle on their paper very quickly. It should be similar to the doodle they did in the air. Allow them to have only 45 seconds.

Have them put their marker down. Then ask them to stare at their “doodle”. Ask them to look for a picture in the doodle.

Their job is to make an object, person or landscape using the original doodle. Using crayons, they make the original doodle into a full picture.

Extension

A variation is to hand one child’s doodle to another to make it into something else.

Another idea is to give less time for the doodle and actually have them make a logo for a chosen product from the doodle.



Time Required

Two 45-minute sessions



Materials Needed

- Markers, crayons and drawing paper.

Activity Objective

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What To Do

Split the class into 4 groups. The teacher will tell the class to invent a hand with 7 fingers. They must decide which fingers will be extra, (for example, 2 thumbs, 2 pinkies etc.) or if they will invent a new finger with a new name. They should draw the new hand and describe how it will work. They should also describe pros and cons and if they would use the new hand.

In the 2nd session, each group makes a presentation to the class about their newly invented body part.

Extension

This activity can be used with any body part. The students could explain why 3 eyes would be valuable or three arms. How could we use two mouths?

The students could create a new part that is a fantasy body part.

Show *Inspector Gadget* video rented from video store and discuss how it would be to have arms or legs that had tools attached.

Another valuable extension activity would be to discuss assistive technology and the need to make new limbs for people.



Time Required

Two 45-minute sessions



Materials Needed

- 4 boxes that the objects fit in

Assorted items found at home, school, play (kids' room or outdoors) and work: paper clips, pipe cleaners, reinforcements, small jars, dowels, cookbooks, spatula, baking materials, etc.

Activity Objective

To combine various items from a particular part of everyday life and work together as a group to invent something to make this part of life easier.

What To Do

First Session: The teacher should break students into four different groups and use worksheets for each group.

Each group will receive a box of assorted items taken from different categories: school, home, play, and work (chores). For example, the school group will have paper, crayons, and a ruler.

Using the items in the box, children will brainstorm ideas and begin to develop an invention to help solve a particular problem in the category their group has.

Second Session: Students will finish thinking up their inventions and then present the invention, as a group, to the class. They can write, draw, or construct their invention. They can use the actual objects or find pictures on the web and magazines to supplement their presentation.

Standards – Social Studies

NS.5-8.1

Standards -

Technology

NT.K- 12.5



Time Required
45-minute session



Materials Needed

- newsprint paper, magic markers

Download

Activity sheets and duplicate enough copies so each pair has list A and list B

Activity Objective

Students will combine two items to invent a third item and then explain why this third item works. This activity practices inventive thinking and increases vocabulary. Students must think about the function of each object alone and then the new function when the two items are paired.

What To Do

Divide your class into groups of two and give each person a list of simple things.

Tell the class about some inventions that were combined or made by putting two simple things together. *Here are some examples:*

Clock + Radio = Clock Radio
 Surfboard + Sail = Wind Surfer
 Magic marker + pen = two-sided writing implement
 Fork + Spoon = Spork

Have students choose an item from their own list and pair it with an item from the other student's list. They must decide which two items to pair and then discuss each item's functions. Then they must name the new item, and describe what it does. When they are done, they draw the new item on the newsprint. They should get ready to present their newly invented item to the whole class.

Extension

- Use a list of food
- Use a list of animals



Time Required

1 period with follow up of additional period



Materials Needed

- Index cards, pens, markers

Activity Objective

To encourage creative thinking based on a joyful experience. To recognize the pleasure and importance of every day life events

What To Do

1. Hand out three (3) index cards to each child. Ask each child to write down 3 important milestones or special events that have happened to him or her, or in his or her family, in school or in the world. These events can be personal - like getting a new bike, in the family - like Mom getting a new job, school wide - like a winning swim team, community wide - like a firefighter doing a heroic rescue, or international - like fundraising for the Tsunami victims.
2. Ask children to share with each other some of the events they have named.
3. Tell children that many people love to go to a party or celebrate. Sometimes we celebrate national events like July 4th, or religious observances, like Christmas, Kwanza or Chanukah, or personal events, like birthdays or great report cards. We celebrate with special food, songs, games, clothing, and activities. *We can celebrate anything we want to!!*
4. Ask each child to select one of the 3 events he or she has named and create a new holiday to celebrate that event. Ask children to name their holiday and develop ways to celebrate that new holiday by thinking of some or all of the following ways and/or others: design special decorations, cook special foods, write and sing holiday songs, wear new holiday costumes or clothing, holiday games, and activities.
5. Have each child create a display or tell about the holiday festivities.

Extension

For follow up, from the ideas displayed or presented by the students, select one (or one each week!) to actually stage as a class and invite other classes to attend the party celebration.

Evaluation

Each student will have an original product to display that he or she has prepared based on his or her own joyful experience.

Source/Credit:
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Time Required
30-minute period



Materials Needed

- Each child needs a piece of ribbon attached to a safety pin.

Activity Objective

This activity requires children to think about ways to creatively stimulate the use of a word.

What To Do

Pin each student’s ribbon on as you describe the rules. The forbidden word is “NO”. The objective of the game is to make students have conversations, ask questions and interact with other classmates. If the student can get another student to say “NO” in response to a question or something else said, the winner takes the ribbon and can attach it to their own ribbon with the pin. The winner of this challenge ends up with all the ribbons attached in a long chain.

Make sure that intimidation is ruled as immediate disqualification.

Extension

Try different words to see how quickly they work. Try yes.
Try why?



Time Required
45 minutes



Materials Needed

- Magic markers and large newsprint

Activity Objective

This activity pairs students together to develop a creative product by working together without speaking. It promotes imaginative thinking and communicating through production of a joint picture.

What To Do

Ask the students to pair off into teams. You can do this by having them sit together or you can use a creative way like giving out names of famous partners (like Romeo and Juliet or Mickey and Minnie). You can use the “Pairs” file for suggestions.- Print the names on separate sheets of paper and then have them search for their “partner” and sit together.

Then tell the students the partner pair will be creating a picture together by “thinking as one”. You can choose the theme or use “inventing” as your theme. Simply say you will make a picture of the two of you inventing something.

Students take turns making a line and then letting their partner add a line, etc. However, they CAN NOT TALK during the drawing. They also can not write notes....they have to read each other’s minds and work together on the picture. They have 20 minutes, Keep quiet while writing the time left on the board in 5 minute intervals...until the 1 minute mark. Give the one-minute warning verbally.

Teacher should circulate the room enforcing the no talking rule. This may end up to be a favorite activity for teachers as it turns the room completely quiet for a brief time.

When you call time, make sure students put their markers down. No more drawing. Tell the partners to talk with each other about their picture and what they were trying to accomplish. Then have them write a small paragraph about the picture. *What were they inventing? How different was the joint picture then what each person had in mind?*

Extension

Display the pictures.

Have the student pairs present their picture to the class.

Try the activity with three instead of two students.



Time Required

Two-45 minute periods



Materials Needed

First Session

Unusual objects:
obscure kitchen tools,
hardware, various
shaped containers,
etc.

Second Session

Arts & Crafts supplies:
paperclips, pipe
cleaners, glue, etc.

Activity Objective

To challenge students to invent a new purpose for an existing object and then to modify the new object to be used for a different purpose.

What To Do

First Session: The teacher should assign students into four groups and give each group a different object.

Have the students discuss the object and brainstorm what the use of that particular object is. Once the group decides what their object's function is, have them present it to the class.

Second Session: For this session, the teacher should put the students back into the same groups they were in during the first session and have them modify the object, using various supplies, to perform another use. Then have the students present the modified objects and the objects purpose to the class.

Extension

Display the pictures.

Students can bring in pictures of objects that were modified and improved.

Give the object and modified object to a different group of students and have them come up with an improved plan extending off the invention of the first group.

Standards – Science

NS.9-12.5

Standards – Social Studies

NS.5-8.1

Standards - Technology

NT.K- 12.5



Time Required
45 minute period



Materials Needed

- Newsprint, magic markers, tape, downloaded and printed chart

Activity Objective

To have students explore different ways to adapt tools of trades for dissimilar trades. This is a brain stretcher that gets kids thinking of what is and what could be done differently.

What To Do

The teacher should copy the downloaded chart on to large newsprint. You will need 5 charts for 20 students. Tape charts to walls around room.

Make groups of 4 students and assign them to stand by a chart with magic marker. Each group should have a distinct color marker.

Have them choose one occupation and write it in the box.

Then they need to come up with three tools and fill in the “what is it used for and why is it used”. They should leave the new tool field blank.

After about 10 minutes, the teacher should call “time!” and have each group move to the next chart counterclockwise. They should write in their occupation on the next line and pick one of the three tools from the original occupation on the chart and design a new tool from the original tool. They enter this into the new toolbox on the chart. They must come up with a new name and what is used for in the new occupation.

For example, a dentist mirror might be used by a teacher to watch her students. A paintbrush might be used by a computer technician to dust keyboards.

After 10 minutes groups change again, walking to the next chart and proceeding to put in their occupation and changing one of the tools in the chart to be useable by their profession.

Extension

Have students cut pictures of people and their tools from magazine.

Have students make a collage of the new ways to use the tools in other professions.

Standards – Science

NS.5-8.5

Standards – Social Studies

NSS-EC.K-4.14

NSS-EC.K-4.6

Standards - Technology

NT.K- 12.5

NT.K-12.6

Where's my shoe? Or "Sneaker Detective"



Time Required

45 minute period



Materials Needed

- A large black non-see through garbage bag and a large box (about 1' x 2') should work well.

One desk or table with a seat behind it. Arrange three seats in a semi circle facing the table or desk. The box should be open toward the one student and facing away from the other three.

Activity Objective

This activity provides practice in careful description. Use this to train observation and description as an introductory experience. Students will take turns describing a sneaker to another student until they can identify their own sneaker.

What To Do

Have one of your students remove a sneaker (or find a huge sneaker in a thrift shop/take off your own/get one from someone's closet) Ask for some descriptive words that tell about the sneaker. You might want to write some of these on the board.

Draw attention to color words, texture words, shape words, and parts of the sneaker. Don't take more than a few minutes to jumpstart the creative juices. Having some words on the board to refer to during the exercise will help students who have poor vocabulary skills. You might review sole, laces, tongue and other sneaker part vocabulary as well, depending on the age of your students.

Tell them they will be playing "Sneaker Detectives".

Ask the students to arrange themselves in groups of four as described above. One student is initially named the "Sneaker Detective". Their job is to describe the sneaker to the other students and allow them to guess which sneaker he/she is describing.

The other three students (non-detectives) take off one sneaker each and put it into the large garbage bag. The "Sneaker Detective" carefully transfers one of their shoes to the box without showing the students which sneaker they transferred.

The "Sneaker Detective" then places the box in front of them on the desk so that he/she can see the sneaker but the other kids can't!

The Sneaker Detective describes the sneaker while the other students listen. (Their other sneaker is on, so encourage younger or more limited students to look at their sneaker during the description.) When the student with that particular sneaker guesses correctly, they get to put their sneaker back and take a turn as the "Sneaker Detective". Continue until everyone has had a chance to be the "Sneaker Detective".

Debrief the experience by having students tell you about the descriptive words they used. Write them on the board to add to your list.

Extension

Have students keep their sneaker on their desk and draw the sneaker. Have them label what descriptors they or the Detective used for their sneaker.

Another version of this game has the three kids ask questions about the hidden sneaker. One at a time they ask a "What's my line" kind of question.

Standards -Technology

NT.K- 12.5

NT.K-12.6



Time Required
15 minutes



Materials Needed

- Chairs in a big circle.

Activity Objective

This activity shakes up the group and allows the creative juices to flow. Do this in the very beginning of the unit and let kids be silly. They need to know that it is okay to laugh at being silly in order to be productive. Being serious or worried about whether an idea is silly stops the inventive thinking process.

What To Do

Ask the students to move the chairs into a circle and put the desks in the corners. Then explain the rules:

The word “ZOOM” is passed from one person to the next clockwise or counter-clockwise – your choice. One person starts out by saying ZOOM to the person next to them. They then turn to the person next to them and say ZOOM. Thus “zoom” passes around the circle. Try this a few times.

Then introduce “EEEK”. Everyone gets one EEEK. As ZOOM goes around, a person can change the direction of the ZOOM by saying EEEK. When a person says EEEK, ZOOM turns back to reverse to the direction.

Try this out a few times before you give out the EEEKs.

Once the students have the gist of it, let ZOOM go around the circle and keep track of each EEEK. Make sure everyone has the chance to EEEK and change direction.

If you want the kids to feel comfortable doing something silly, you do have to model a little!

Extension

Use this activity any time you need to recharge creative batteries. This is also a great adult/child/grand-child or even mixed language groups activity.

Use other sounds to produce action on the circle. For example, you can say “stomp” to have people stamp their feet.