Perception



# Sequences

Skills Interpreting pictures and details; developing logical thinking; strengthening left-to-right progression; placing a series of pictured events in sequence to tell a story.



The child looks through the pictures. He decides what he thinks happened in the story and places the first picture in the sequence at the left. The next picture will show the second event, and so forth, until the story is told. The child repeats this procedure for each pocket chart story in the workjob.

The teacher might assist the child to begin by saying, "Look at all the pictures and see if you can guess what happened first—put that picture by the dot [or X] here at the left. Put what happened next here; and what happened at the end will go—where? Yes, now do the first one while I watch."

Tell me about this story.

Which picture happened last in the story about the man with a flat tire FOLLOW-UP DISCUSSION on his car?

Which picture happened first in this story?

What are the people wearing in the story about the cat?

How do you think the people feel in this story? Why do you think they feel this way?

How many stories did you arrange in order?

Which story did you like best? Which was the funniest? Why did you think it was funny?



A group of pictures that tell a story when placed in order.

MATERIALS

A small pocket chart for each set of pictures made by stapling a 1/2" strip along the bottom of a tagboard rectangle.

Yarn or elastic tied through a hole in each picture and then secured to the individual pocket chart.

Spray paint to paint pocket charts.

Library-book pocket glued to the back of each pocket chart to hold pictures between uses.

Container for the pocket charts.

*Note:* It is helpful to mark an X or a dot at the left of each pocket chart to indicate the correct position for the first picture in each series.

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# ACTIVITY

GETTING STARTED

## IDEAS FOR FOLLOW-UP DISCUSSION

# The Rice Game

Skills Measuring: making comparisons and seeing relationships; making judgments; developing hand-eye coordination.



The child pours the rice into the jars, being careful to stop filling each **ACTIVITY** jar at the line marked by the rubber band.

Some children will enjoy counting the number of scoops of rice it takes to fill each jar. They can record the number of scoops on a small piece of paper placed in front of each jar. After all the jars are filled the child might order them from the one containing the least amount of rice to the one with the most.

The teacher might say, "See if you can fill the jars up to the line GETTING STARTED exactly!"

Tell me about your work, Janice.

What exactly did you do?

Which jar do you think has the most rice in it? The least? What makes you think so?

Are there any jars that have the same amount of rice?

What color rubber band is on the jar that is half full?

Do you remember which jar was the first one you filled? The last one? What do we call this food?

Do you ever have it at home? Who fixes it?

Pour the rice out of this bottle and find out how many cups there are.

Would you like to do it for these others, and write down how many

cups you used in all? How would you go about it?

MATERIALS

Assorted glass jars and bottles (about ten) of varying sizes and shapes. Colored rubber bands glued to different levels on the containers.

2 to 6 lb of rice, depending on the size of the jars and bottles used. Plastic dishpan for the rice.

Funnel.

Scoop or long-handled measuring cup. Container for jars.

Note: It also is a good idea to place the lid of a large box (as a blanket box) under the jars to catch spills. Have the child fill the jars in the dishpan and then set them aside.

The teacher may want to vary the rice game at some time during the year by coloring some of the rice. This can be done by shaking a cup of rice in a jar along with 11/2 tablespoons of rubbing alcohol and a squirt of food coloring.

# **IDEAS FOR** FOLLOW-UP DISCUSSION

# Jars and Lids

Skills Observing size relationships; developing hand-eye coordination; developing small muscles; learning to twist and untwist; learning to make predictions; making comparisons.



24 Language

The child puts the lids on the jars. The task is self-checking: there are twelve jars and twelve lids. If the child puts the wrong lid on one of the jars, he will have a lid left at the end that does not fit the remaining jar.

Children enjoy timing themselves with a stopwatch to see how long it takes them to replace all the lids on the jars. A child can keep track of his best time and compete with himself to improve his time.

Children also enjoy measuring around the widest part of the jar with a piece of string and comparing this length to the jar's height.

The teacher might say to the child, "Can you put these together?"

- Antoinette, look at this lid for a minute. Do you think it could fit on this jar? Why not? Do you think this one is too small too? How about this one? Try it and see. Good!
- Show me a lid that you think would be much too small for this jar. Show me one you think would be much too big. Now show me one you think would be just about right.

Show me the jar with the biggest lid. Well, that's the biggest jar for sure, but which jar has the biggest *lid*?

Which jar has the smallest lid?

Show me how you put on this lid. What do we call that motion? What about if you take it off? What do we call the motion?

How many jars are there? How many lids? Are there more jars than lids?

What are these jars made of? What are the lids made of?

ACTIVITY

## GETTING STARTED

IDEAS FOR FOLLOW-UP DISCUSSION

Twelve jars with lids, each of a different circumference. Container for the lids. Container for the boxed lids and the empty bottles.

# MATERIALS

# Corks

Skills Distinguishing between different sizes and using this skill to make predictions; experiencing one-to-one correspondence; developing the visual and tactile senses; experiencing success in completing a task.



The child takes the corks and rubber tips and fits them together. The task is self-checking since the child must do it correctly or he will have corks left over that do not fit into rubber tips. After placing the corks and rubber tips together, the child can group them together in some way.

Children for whom this task would be very easy may enjoy trying it blindfolded.

Other children may enjoy estimating the length of all the pairs placed in a line by cutting a length of string and then placing the pairs in a line to check the estimation. They might also estimate the height of the pairs stacked one on top of the other and then check this prediction.

The teacher might begin with: "What can you do with these two things? Show me. Good! I'd like to see them when they're all put together."

How are these things the same? Is there anything different about them? How many sizes are there? Show me a small cork. A small rubber tip.

Show me a large cork. A large rubber tip.

Put this cork into the rubber tip you think it fits. And this one.

What did you do with the corks?

Show me a small cork and rubber tip. Are there any more small sets? How many? How many is that altogether?

Show me a large set. Show me three large sets.

Are there any sets that are the same in some way that you could group together? How are these the same? Yes, they're the same size! Can you group all the sizes together?

## ACTIVITY

**GETTING STARTED** 

IDEAS FOR FOLLOW-UP DISCUSSION

Seven small corks and nonskid chair leg tips to fit the corks. Seven medium corks and tips.

## Seven large corks and tips.

Bucket (3-quart size) or other suitable container for the separated corks and tips.

*Note:* If rubber chair leg tips are used, they may be cut down about 1/2'' with a serrated knife so the child can more easily push in and remove the corks.

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MATERIALS

# Button It Up

Skills Developing small-muscle and handeye coordination; learning skills for dressing and undressing; to snap, button, hook, zip, tie, and buckle.



The child selects an article of clothing and puts it on over his regular clothes and fastens it closed. For example, if he chooses the shirt which has hooks and eyes, he hooks the shirt closed. (A large mirror, full length if possible, should be available for the child to use during the process.) Then he puts the next one on over the first, and so on, until all are on. A child who is very confident may like to attempt this task while blindfolded.

The teacher might ask, "Which outfit would you like to put on, David? Put on all the clothes—one on top of the other—and fasten them closed."

Tell me about what you did, David.
What do you call this type of clothing?
How many other shirts/dresses are there in this box?
How many are there altogether? *Counting* this one you have on?
What color is the shirt you have on?
What do you call this pattern?
How does the shirt close? How about this dress?
Do you have anything to wear at home with snaps on it? What? Can you fasten them yourself?
Which piece of clothing do you like best? Least?
What color is the dress with stripes? The shirt with checks?



MATERIALS

lace them. Shirts and dresses slightly larger than the child, with various closings including buttons, hooks, snaps, belts, zipper.

Container for the clothes.

*Note:* It is especially good to have two types of zippers—one a skirt-type zipper and one a jacket-type, which is particularly difficult for young children to learn to zip.

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# ACTIVITY

# GETTING STARTED

# IDEAS FOR FOLLOW-UP DISCUSSION

# The Bolt Board

Skills Distinguishing among various sizes; learning to think ahead and make predictions; learning how to screw and unscrew a bolt; developing the tactile and visual senses; developing the small muscles used for writing; making comparisons.



The child screws the bolts into the nuts while blindfolded. The task is self-checking since the child must select the correct sizes of nuts and bolts or he will have some left over. Many children will enjoy the challenge of predicting which bolts go with which size nuts *before* they try them. They can place the bolt they think will fit in front of a nut. Sometimes children want to keep a record of how many of these predictions were correct to see if they improve their record on subsequent trials.

Two children often like to work together on this task with blindfolds on. If a tape recording can be obtained, the teacher can gain important insight into children's thinking and language development.

The teacher might introduce the activity as follows: "Choose a bolt from this container, Antoinette. Look at the board. Where do you think it will fit? Here? Here? How about here? You try it and see. Put your fingers in the back of the nut and feel what happens as you screw the bolt through. Very good! Find where each bolt goes and then let me see!"

What did you do with all the bolts, Antoinette?

Are all the bolts the same size?

Are any bolts the same size? Show me.

Show me a bolt that is small. One that is medium sized. One that is large.

Show me a nut that is *not* on the right side of the board. What side is it on? What size is it?

Are there more small nuts and bolts or more large nuts and bolts? Show me.

Point to a bolt that is not medium sized, and not small sized. What size is it? Where is it on the board?

How many nuts and bolts are there altogether? Count them for me, please.

What happens if you try to put the bolt into the nut from the other side? Will it still screw in? Try it and tell me what you find out.

One piece of wood 1" X 1" X 3' glued to a 1" X 4" X 3' board. Five small nuts and bolts. Five medium nuts and bolts. Five large nuts and bolts. Epoxy glue to glue nuts to the small piece of wood. Container for bolts.

## Blindfold.

ACTIVITY

# **GETTING STARTED**

# IDEAS FOR FOLLOW-UP DISCUSSION

MATERIALS

# The Nail Game

Skills Classifying according to size; developing the ability to think ahead and make predictions; developing the tactile and visual senses; making comparisons.



A child takes the can of nails and spreads them out on a small rug so he can see them and so the noise will not disturb other children working. He puts the nails one at a time into the appropriate holes. The task is self-checking: the child ends up with extra nails and the wrong-sized holes if he makes a mistake along the way.

A child who seems to have difficulty with this experience can be given just two sizes of nails to work with at first—the small ones and the very large ones. In this way the child can easily see that there are only two sizes, and prediction will be almost natural.

The teacher might discuss the activity as follows: "See if you can find which hole this nail fits into. Good. What do you think about this one? You're doing fine, Lewis. When all the holes are filled, see if you can see the pattern the nails make."

If a child works for a long time solely by trial and error, the teacher may suggest the following: "Without trying it, Lewis, where do you think that nail might go? Why? Try it and see. Good. How about this nail? What size is it? Are there any nails already in the board that are the same size? Where? Where do you think your nail might go? Why? Try it and see."

Tell me how you put the nails in the board. Did you see any pattern as you were doing it? Was there any way you could tell just by looking at the nail where it was going to go? How?

Show me a small nail. Show me a large nail. Show me a nail in between those sizes. Why is the large sized nail in the wood the same height (just as tall) as the small sized one? How can that be? What makes this one small and this one large? Is it still large when it is *in* the wood? Why?

What shape do the nails outline? What part do the small nails make? What part do the medium ones make? The large?

## ACTIVITY

## **GETTING STARTED**

## IDEAS FOR FOLLOW-UP DISCUSSION

## MATERIALS

Piece of wood at least 3-1/2'' thick and  $8'' \times 16''$ .

15 small nails (1-1/4'') with heads.

15 medium nails (2-1/4'') with heads.

15 large nails (3-1/4'') with heads.

Hand or power drill with small, medium, and large bits to match the nail sizes. Container for the nails.

*Note:* Several pieces of wood may be glued together to attain the needed thickness. Also, because the child will use only his fingers to insert the nails, the holes must be big enough so the nails drop down easily and can be easily lifted out. They should be drilled to whatever depth is necessary so that the heads are all at the same level.

# Hook Board

Skills Experiencing one-to-one correspondence; developing hand-eye coordination; strengthening the small muscles used in writing; working with various sizes and distinguishing among them; making comparisons.



ACTIVITY The child hangs the washers on the hooks. (A similar hook board may be made with one size hook and the child can form patterns with washers of different sizes and colors.)

The teacher might say, "Put one circle on each hook, Lisa." (The child GETTING STARTED should be left free to discover the possibility of placing the metal washers on the hooks by size.)

What did you do with the metal circles, Lisa?

Tell me about the different sizes you see. Are all the circles the same size? Are any of them the same size? Take all the circles off the hooks and put all the same sizes together.

Trace around some of the circles on a piece of paper and try to use the circles as part of your picture. Try it and see how it turns out.

# **IDEAS FOR FOLLOW-UP DISCUSSION**

Plywood, 12" X 16". Piece of wood nailed to the edge of the plywood to make it stand up. Spray paint. Brass cup hooks of various sizes: 10 small, 10 medium, and 10 large.

Metal washers: 10 small, 10 medium, and 10 large. Container for the metal washers.

MATERIALS



# The Pegboards

Skills Observing and reproducing patterns; developing the small muscles; strengthening hand-eye coordination; perceiving differences in color and configuration.



The child reproduces the pattern with colored pegs in the marked-off **ACTIVITY** area of each pegboard.

The difficulty of this workjob is regulated by the difficulty of the pattern. There should be several experiences of each of the types shown below. Three to four pegboards then can be grouped together in one box as a workjob. In this way there may be several different sets of pegboard-pattern workjobs.

The teacher might discuss the activity as follows: "Point to a part of this pattern that is all one color. Good. Now, take some pegs of this color and make the pegboard just like this part of the pattern. Does this look the same as the pattern to you? Are the pegs in the right place? Can you fix it then? Now that's fine. You have the idea now."

What did you do with the pegs, Nathan?

How did you know where to put the pegs and what colors to use? Tell me about the colors in your pegboard pattern. How many rows, or lines, do you have of red? How many rows of green? Tell me about

this part. Show me a pattern that has two rows of green going across and then

two rows of yellow. You tell me about a pattern and I'll guess!

Individual  $12'' \times 12''$  pegboards with a  $4'' \times 6''$  area marked off as the child's working area.

MATERIALS

 $4'' \times 6''$  tagboard pieces for patterns the child is to repeat.

Colored pencils for coloring the patterns.

Clear contact paper to protect the patterns.

Masking tape to strengthen the edges of the tagboard.

Assorted colored pegs (plastic pegs are far more durable than wooden pegs, and

their colors never fade).

Container for pegboards.

Plastic bucket for pegs.

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# **IDEAS FOR** FOLLOW-UP DISCUSSION

**GETTING STARTED** 



# Go-Together Bottles

Skills Associating things that belong together; developing logical thinking; making selections; identifying names of objects.



The child takes the jars with the objects and places them so he can see the objects inside each one. Then he takes the pictures and places them on top of the appropriate jars.

The teacher might ask, "What is inside this jar? Can you find a picture of something that goes with it? Would these two things be used together? How about this? What would be used with it?"

How would these two things be used together? Would you ever use them? Would your mother?

Show me something you could use to sew with. Show me something you could write with. Show me something you could burn with.

Show me three things that are black. Show me two things that are red. Show me something a baby could use. Something you could find in a drawer. Something with legs.

Show me something made of wood. Of plastic. Of metal.

# Inde Rock Inde Inde

Some children may enjoy matching words to the jars.

MATERIALS

*	-		
20 objects:			
watermelon seeds	pencil eraser	can opener	stamp
tire	key	pill	candles
match	water	hollow egg	buttons
safety pin	flower	pennies	stars
needle	peanuts	fishing hook	nails
20 pictures, backed wi	th cardboard and c	overed with clear con	tact paper:
watermelon	pencil	soda can	letter
toy car	door	vitamin bottle	cake
fire	bathtub	hen	shirt
baby's diaper	vase	piggy bank	flag
thread	peanuts in shell	fishing pole	hamme
Container for nictures	-		

Container for pictures.

20 baby food jars with lids.

Tape to seal the jars closed when objects are inside.

Container for boxed pictures and jars.

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## ACTIVITY

**GETTING STARTED** 

# IDEAS FOR FOLLOW-UP DISCUSSION

# The Block Patterns

Skills Perceiving colors and patterns; matching; learning to think ahead; comparing and making judgments; strengthening memory.



A child takes a number of cards and some blocks and builds the pattern beside each model. This workjob is varied by the number of cards a child selects and whether he builds on or off the pattern. A young child may need to build directly on the pattern in the beginning and will benefit from this practice in one-to-one correspondence. As the child gains in skill and confidence he will build by the side of the pattern with ease.

A more mature child may enjoy the challenge of building the pattern from memory by turning the pattern card over before starting to build. More challenging still would be to ask the child to build the mirror image of the pattern. He might begin by placing a mirror on the card at the edge of the pattern and reproducing the reflection *behind* the mirror. As the child gains in skill he will be ready to imagine the reflection, build it, and then check his prediction with the mirror.

The teacher might discuss the activity as follows: "What color blocks are used in this pattern? Take as many blocks as you need and build the pattern beside the answer. Well done. Try the next one."

What did you do with the blocks?

Do you think you used more than 10 blocks altogether or less than 10? What makes you think so?

What colors did you use in this pattern? This one?

How many red blocks did you need for this pattern? How many green ones? How many blocks altogether did you need?

If I asked you to build this pattern, what color blocks would you need? Show me a pattern that you like. Tell me about it.

If I turn the card over, do you think you could build the pattern again from memory? Try it?

## ACTIVITY

## **GETTING STARTED**

MATERIALS

# IDEAS FOR FOLLOW-UP DISCUSSION

Tagboard pieces,  $6'' \times 9''$ .

1'' construction paper squares in colors to match the cubes. Rubber cement.

Clear contact paper to cover the answer cards.

1" cubes of various colors.

Container for cards.

Container for blocks.

# Sock Boxes

Skills Identifying shapes through touch; associating form and object; stimulating the imagination; making selections.

![](_page_23_Picture_2.jpeg)

The child puts his hand into the sock box and feels the item inside. Then he sorts through the pictures to find the one that matches what he feels inside the box and places it on top of the sock box. He repeats this procedure for each box, feeling each item, but never looking at it.

The teacher might discuss the activity as follows: "Put your hand inside and feel what's there. Can you find a picture of what you feel and put it on top of the box?"

What did you find inside the sock boxes? Can you remember without looking at the pictures?

How many boxes are there altogether?

How did this feel? And this?

Show me something that felt soft. Rough. Tickly. Can you tell me what color this is by feeling? Why not? Which thing was the nicest one to feel? Why?

![](_page_24_Picture_6.jpeg)

### 10 socks.

10 quart-sized plastic containers, approximately 4" tall, stuffed into the socks.
10 objects to be placed in socks (feather, jacks, pencil, toothbrush, nail, walnuts, toy car, large rubber band, blunt scissors, small ball of yarn).

10 pictures (backed with cardboard and covered with clear contact paper) of the objects placed inside the socks.

Container for sock boxes and boxed pictures.

*Note:* For ease of checking, a code such as the first three letters of the name of each object can be written on a strip of masking tape and placed on the outside of each box. This enables the teacher to check the pictures without reaching into each sock.

ACTIVITY

# GETTING STARTED

# IDEAS FOR FOLLOW-UP DISCUSSION

Children who are ready may label the objects with words rather than pictures.

# MATERIALS

# Keys and Locks

Skills Developing hand-eye coordination; strengthening memory; perceiving different sizes and shapes; developing the small muscles; observing an orderly sequence.

![](_page_25_Picture_2.jpeg)

The child unlocks each lock with the appropriate key. When he is **ACTIVITY** finished, he locks each lock and hangs up the keys.

The teacher might say, "See if you can open all the locks!"

Tell me how you did your workjob, Mark. What are these called? And these? How many locks are there all together?

Are there more locks than keys?

If I took away this key, would you be able to open all the locks?

Do you need the keys to put the locks back on and close them? Try and find out.

Do you have any locks like these at home?

What locks have you been allowed to open at home?

Do we have any locks in our classroom? See if you can find out how many.

![](_page_26_Picture_9.jpeg)

A piece of plywood approximately  $1' \times 18''$ . Small doors hinged to a strip of wood to be nailed to the plywood. Rings or fasteners on which to hang the locks.

Assorted locks and keys.

Key chain for keys.

A piece of wood approximately  $1' \times 4'' \times 6''$  to nail to the edge of the plywood to make it stand up.

Hook on which the keys may be hung.

Funny pictures to be glued inside each door.

*Note:* The difficulty of this workjob depends on the number of locks included. A combination lock can provide a great challenge.

# **GETTING STARTED**

IDEAS FOR FOLLOW-UP DISCUSSION

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MATERIALS

# The Screw Game

Skills Observing size differences; making predictions; developing the small muscles used in writing; learning to use a screw-driver to put in and remove screws.

![](_page_27_Picture_2.jpeg)

46 Language

The child screws each metal screw into the correctly sized nut on the ACTIVITY board with his screwdriver.

This workjob is especially well suited to the boys in the classroom, and they often like to pair up and do it together. The resulting conversation often is well worth recording on tape. The boys in class also seem to especially enjoy using a stopwatch with this activity to time the process of screwing in each bolt. Some of them time the whole process and compete with one another for the best time. Others work together and time how long it takes to screw in one bolt and then try to increase their speed with each succeeding bolt. Some children even like to count the number of turns it takes different sized screws to go into the board.

The teacher might ask, "Can you screw these screws into the holes, Charles?"

What have you been working with, Charles? Tell me what you did.

What are these called?

How did you go about putting the screws into the wood? Are all the screws the same size, Charles? Tell me about the sizes. Have you ever used a screwdriver at home? What for? Did you ever see someone else using a screwdriver? What for? Who? **GETTING STARTED** 

MATERIALS

# **IDEAS FOR** FOLLOW-UP DISCUSSION

One piece of wood at least 1-1/2'' thick.

# A drill for drilling holes into the wood.

Epoxy glue to glue the nuts over the holes in the wood.

15 stove bolts with matching nuts.

A short-handled (4'') screwdriver (much easier for a young child to manipulate than a long-handled one).

Container for screws and screwdriver.

Note: The nuts can be hammered flush with the wood so they will stay firmly in place.

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