With the Design & Drill Activity Center, children design their own learning fun! The sturdy board, big bolts, colorful activity cards, and realistic tools encourage young learners to develop a variety of important skills, from color recognition and counting to fine-motor skills and following directions.

**CONTENTS**

- Power drill
- Activity board
- Wrench
- Screwdriver handle
- 2 drill bits (flat tip, Phillips)
- 100 bolts (in 5 colors)
USING THE DESIGN & DRILL ACTIVITY CENTER

GETTING STARTED

1. Insert three AA batteries into the drill’s battery compartment following the directions on the back cover of this guide.

2. Show the child the three different drill bits (flat tip, Phillips, and socket) and encourage him or her to experiment with how each one fits into or over the head of one of the bolts.

3. Help the child snap one of the bits into the drill.

4. Point out the three positions of the power switch—forward, off, and reverse. Let the child experiment with the different positions.

5. Place one of the bolts into a hole in the activity board and have the child use the forward position of the drill to screw it in.

6. Demonstrate to the child how to use the drill’s reverse position to remove the bolt.

7. Let the child practice using the drill, bolts, and activity board—changing the drill bit as he or she wishes.

8. For some kid-powered fun, show the child how to snap one of the drill bits into the screwdriver. Encourage the child to use the screwdriver and wrench to screw in and remove the bolts.
ACTIVITY CARDS

Before presenting the activity cards, encourage the child to play freely with the board, bolts, and different tools—screwing the bolts in randomly, or creating simple patterns and pictures.

When you feel the child is ready to work with the activity cards, choose one of the simple pattern cards. Place it next to the activity board to develop matching skills. Help the child to develop a strategy for working with the card. For example, on some cards it is helpful to begin at the top of the card, or at the right-hand side, and work to the opposite end of each row. Encourage the child to pay close attention to the relative positions of the bolts by counting the number of blank holes. You can help by asking questions such as, “What is next to the yellow bolt?” “What is under the red bolt?” “What is above the green bolt?” “How many blue bolts are there in that row?”

Tip: Some children find it helpful to say the pictured pattern aloud as they work, for example, “Green, green, yellow.”

As children gain more experience with making the patterns on the cards, introduce the cards with more complex designs and the picture cards. You can also use the picture cards to encourage language development by discussing the details in each picture, or having a child tell you a story about the design he or she is working on.

MAKE-YOUR-OWN CARDS

Reproduce the blank pattern card to create your own patterns for children to follow. Children’s coloring books are a good source of simple, fun picture ideas. You can also give children copies of the pattern card to plan their own patterns, such as a favorite animal or toy. If you wish, laminate the cards and add them to your collection of pattern cards for other children to use.
BATTERY INSTALLATION AND INSTRUCTIONS

1. Requires three AA batteries, not included.
2. Batteries must be inserted with the correct polarity.
3. Do not mix old and new batteries.
4. Non-rechargeable batteries are not to be recharged.
5. Do not use rechargeable batteries.
6. Do not mix different types of batteries: alkaline, standard (carbon zinc), or rechargeable batteries.
7. Only batteries of the same or equivalent type are to be used.
8. Remove exhausted batteries from the unit.
9. The supply terminals are not to be short-circuited.
10. To prevent corrosion and possible damage to the product, it is recommended to remove the batteries from the unit if it will not be used for more than two weeks.
11. Cleaning instructions: Clean product with a damp or dry cloth—do not immerse or spray any liquid or water on product.