



peg+cat

Make a 3D Dreidel With a 2D Piece of Paper



Hanukkah is the Festival of Lights!

All over the world, Jewish families play with dreidels on Hanukkah. The dreidel is a spinning top that has four sides, and each side has a Hebrew letter on it. The letters stand for the Hebrew saying “Nes gadol haya sham” which means “a great miracle occurred there.”

Peg and her friends are so excited to celebrate Hanukkah, but when Albert Einstein gives them dreidels that do not spin, they need to use math to solve their Hanukkah problem. To make the dreidels spin, they learn about different dimensions — 2D and 3D.

This piece of paper is flat. It only has length and width — two dimensions. But a dreidel isn’t flat, it has three dimensions: length, width and height.

How to Make the Dreidel

To make a 3D dreidel from this 2D piece of paper, cut out the dreidel from the template using the dotted lines as a guide. Then, fold all of the solid lines and put it together with some glue or tape. Add a straw (or make your own by rolling scrap paper) and make it spin! Problem solved!

How to Play the Game

After you make your dreidel, it’s time to play the game! Have each family member collect tokens, marbles, candies, or other small items. Sit in a circle and place an item in the center of the circle. The first player spins the dreidel and does whatever the instruction is depending on what side of the dreidel lands face-up. The next player spins the dreidel and the game continues. Have each player add an item to the center of the circle if it ever gets empty. A player is out once they run out of items. And the game is over when one player wins all of the items.

Once constructed, the dreidel has four letters on it — one letter on each of the sides. Here’s what the letters mean and what you do when the dreidel stops spinning.

- Nun is “nisht” or “nothing.” The player does nothing!
- Gimel is “gantz” or “everything.” The player takes all of the items in the circle.
- Hey is “halb” or “half.” The player takes half of the items in the circle. (If there is an odd number of items, the player takes half of them plus one extra.)
- Shin (outside of Israel) is “shtel” or “put in.” Peh (in Israel) also means “put in.” The player adds an item to the collection in the center of the circle.

Explore Further

Learn more about your dreidel by measuring its length, width, and height! Or check out other 2D and 3D shapes around your house, such as circle and spheres.

Find more games and activities at pbskids.org/peg

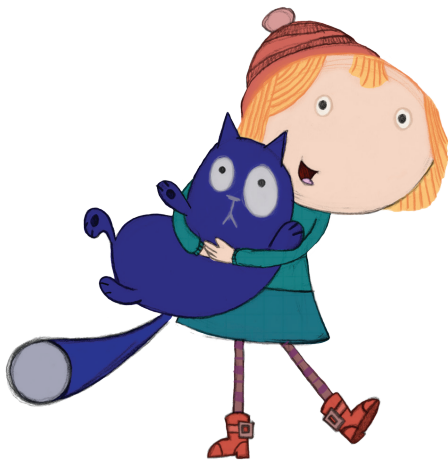
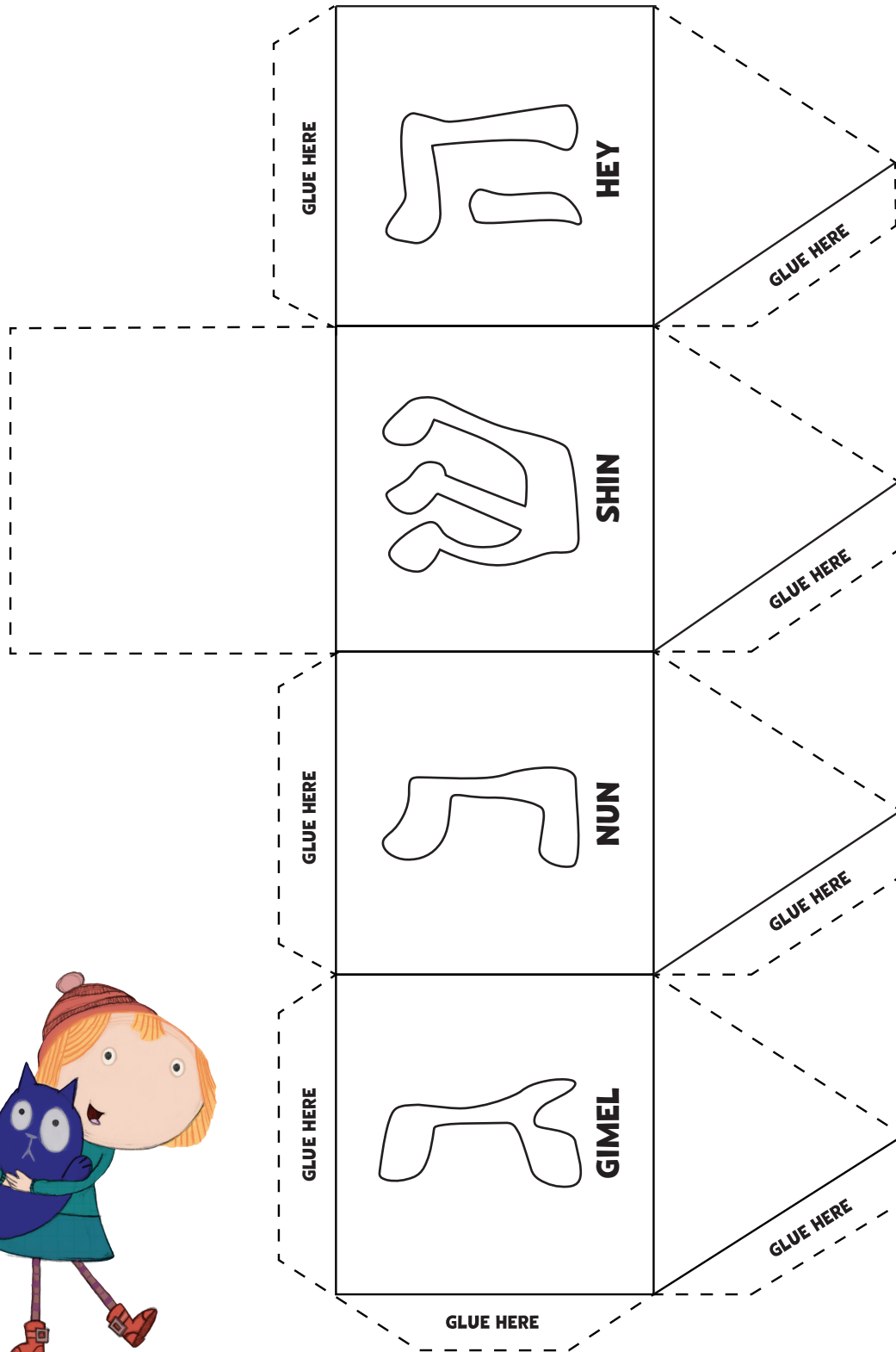
Funded by:





peg+cat

Make a 3D Dreidel With a 2D Piece of Paper



Find more games and activities at pbskids.org/peg

Funded by:

PBS KIDS and the PBS KIDS Logo are trademarks owned by Public Broadcasting Service. Used with permission. PEG + CAT © 2013, Feline Features LLC. All rights reserved. The contents of this document were developed under a grant from the Department of Education. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government. The project is funded by a Ready To Learn grant [PR/Award No. S295A200004, CFDA No. 84.295A] provided by the Department of Education to the Corporation for Public Broadcasting.

