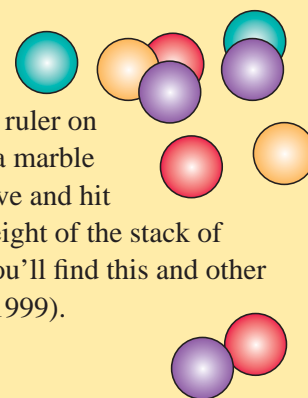


9. How much momentum do objects gain as they roll down slopes? You can experiment to find out. Fold an index card in half, then in half again. Get a plastic ruler with a groove or indentation running along the length of its flat top. Place one end of the ruler on a small stack of books. Set the folded card on the table, at the bottom of the ruler. Place a marble at the top of the groove in the ruler. When you let go, the marble will roll down the groove and hit the card, pushing it across the table. Measure how far the card moves. Try making the height of the stack of books higher and lower. Does the slope make a difference in how far the card moves? You'll find this and other fun experiments in *Six-Minute Nature Experiments* by Faith Hickman Brynie (Sterling, 1999).



USEFUL THINGS



1. Make a card game out of the “Animal Families” chart on pages 178–181. Write each of the words in that table on a separate index card. Deal five cards to each player. Turn the remaining cards face down except for one that is face up. The first player can take the face-up card or a card from the face-down pile. The player then discards a card into the face-up pile. Each player continues in that same way until someone gets a winning hand of five matching cards. An example of a winning hand is **Elephant-Bull-Cow-Calf-Herd**.

2. Make a line graph of the data table on page 182, “How Old Is Your Dog?” Put human age on the horizontal axis. Put dog age on the vertical axis. Explain how your graph shows what the article claims—that dog aging slows down after maturity.

3. Get together with friends to **see how many silly phobias you can invent**. Maybe flushophobia is a fear of toilets or fidophobia is a fear of pet dogs. You get the idea.

4. Capture the sparkle of colorful birthstones by making your own suncatcher. Remove the paper backing from a small piece of clear contact paper. Cut little squares of colored tissue paper in birthstone colors that you like. Place them on the sticky side of the contact paper in a nice arrangement. Cover with another sheet of contact paper. Tape your creation to a sunny window, and you'll see beautiful colors shining through.

5. Do you know who all of the possible successors to the President are in our current government? **Go online to find out something about all 18 of them**, from the Vice President to the Secretary of Homeland Security. Are any of them ineligible because they can't meet one of the requirements listed on page 184?

6. Pretend that your friend has been invited to tea with the queen of England. You've been there dozens of times, so you know all of the right moves, but your friend is in a panic. **Write and illustrate a Guide to Etiquette** for your friend to study before heading off to Buckingham Palace.

ABOUT THE AUTHOR

Faith Hickman Brynie is the author of 24 science and health trade books for children and young adults. Some of her books have earned awards from the American Association for the Advancement of Science, the National Science Teachers Association, the Children's Book Council, and the International Reading Association. She holds a Ph.D. in science education (curriculum and instruction) from the University of Colorado, Boulder. A former high school biology teacher and university professor, she also was the first “Scholar in Residence” to serve overseas schools of the U.S. government (for children of embassy personnel, for example). She is a frequent contributor to *ODYSSEY*, a popular science magazine for middle-school children.