

Copyright © 2019 Laura K. Nolette

All rights reserved.

Published by Powerline Productions/Kingdom Building Services, Inc.

All Photos & clip art © Meredith Curtis, Laura Nolette, & their licensees/Used by permission.

All right reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means—digital, mechanical, photocopying, recording, or otherwise—without prior permission from the author.

Table of Contents

| Table of Contents | 3 |
|-----------------------------------|------|
| Why Use Multiplication Circles | 4 |
| How to Use Multiplication Circles | 4 |
| Multiplication Circles | 6 |
| Powerline Productions | . 18 |

Why Use Multiplication Circles

When my children were memorizing their multiplication facts, I noticed that writing the facts over and over weren't always helping. We tried using multiplication charts but there always seemed to be a disconnect between the chart and the fact they were trying to memorize.

As I told my mother, a former teacher, about the situation she referred back to her own childhood. This surprised me because I was looking for insight from "the teacher", but my mom always had great ideas about educating and tutoring, so I ran with the idea.

What we had both noticed was that children often would write their multiplication facts in the fastest way they could which often was for example, all the sevens, then all the multiplication symbols, then one through twelve, then all the equals then the answer. Because they had written all the number is order, they were now essentially just skip counting.

The result was that every time my son needed to write the answer to a 7x3 problem he had to skip count, 7 14 21. What was worse he didn't have memorized that 3x7 was the same thing so he would skip count 3 6 9 12 15 18 21. What a waste of time!

Multiplication Circles require the student to write the equations out completely so that they are thinking a complete thought, like a sentence. I even made them read the sentences out loud to me after they finished a sheet, so they were also hearing, "seven times three equals 21" for example.

How to Use Multiplication Circles

Print the following pages. They can be printed on one side of each page to keep them separate or on both sides of a paper to save paper.

On any given page in the space under the circle, you student is to write out multiplication equations. They must write each equation as a single step, like a sentence $(11 \times 3 = 33)$.

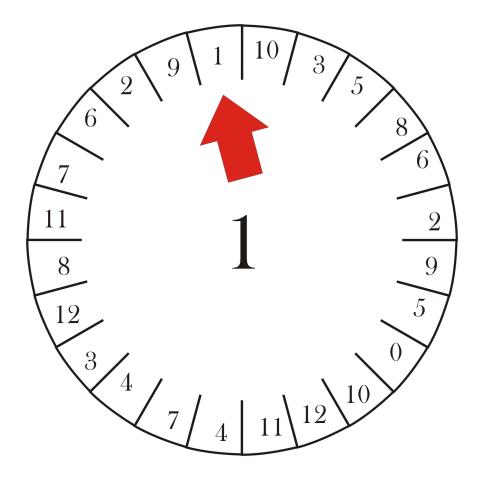
Each equation will start with the large number in the center of the circle (ie.11). That number is first going to be multiplied by the number pointed at by the large red arrow (11 x 3). The student then writes the equal symbol (=) and the answer (33).

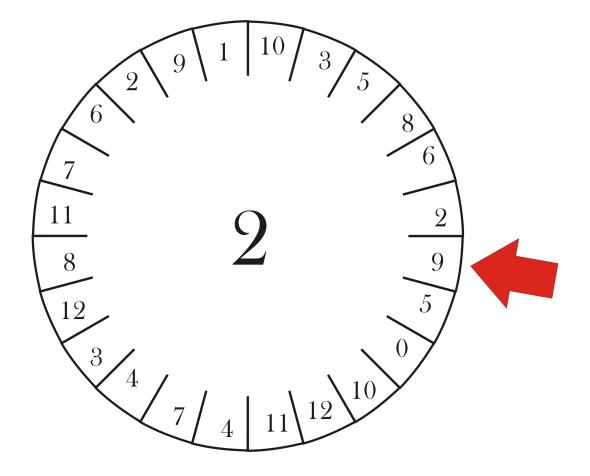
Students must go around the circle clockwise or counter clockwise, you decide, and write each equation.

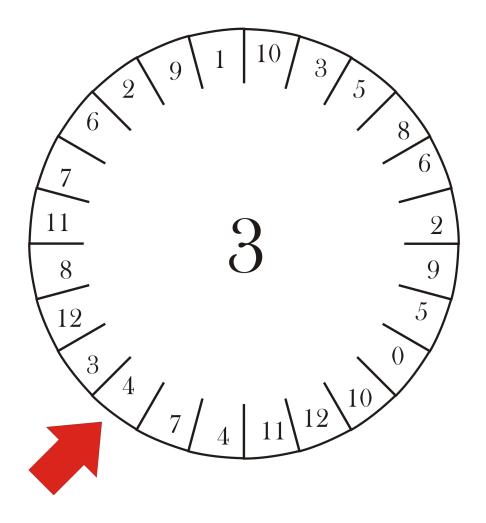
It is important that they do not just write all the large numbers, then all the multiplication symbols, then all the other numbers, etc. This defeats the purpose.

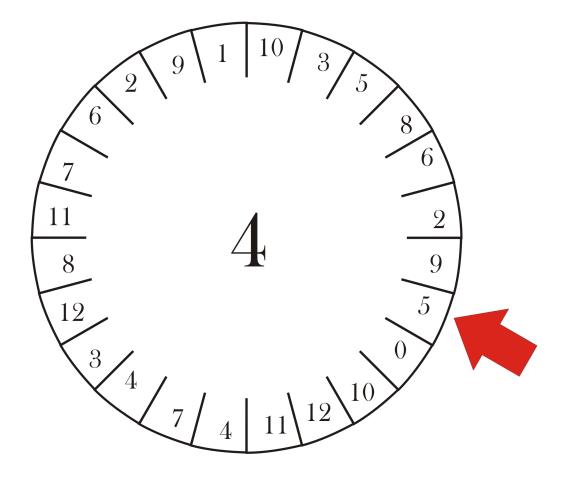
Have them read each equation like a sentence after the sheets are finished. Hearing the equation while looking at it helps auditory learners as well as visual learners.

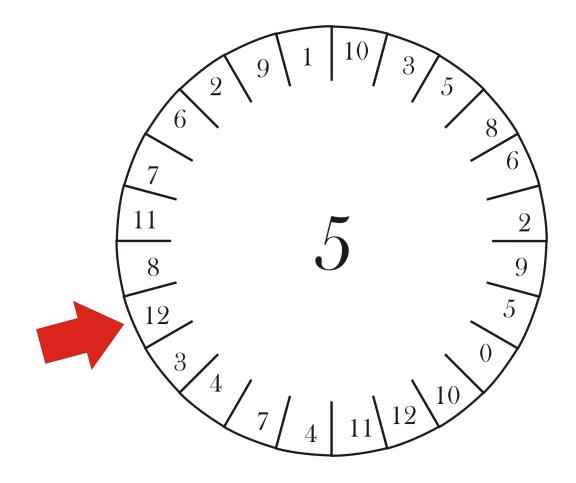
Multiplication Circles 12^{10}

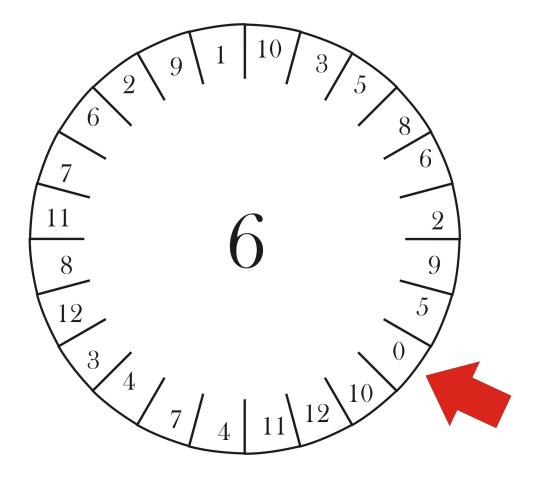


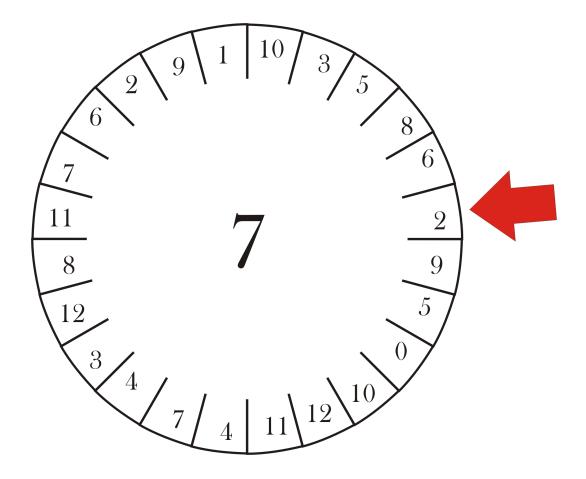


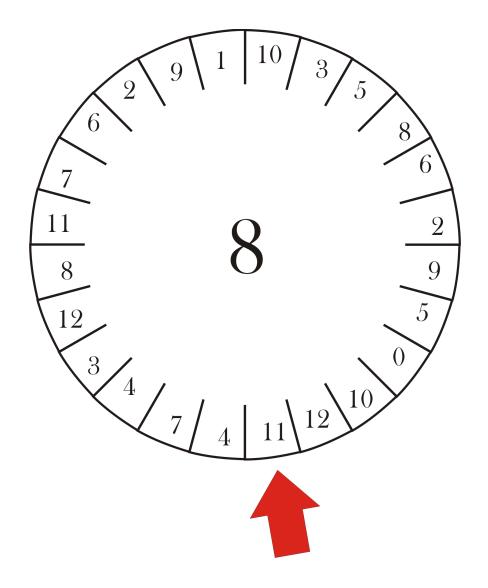


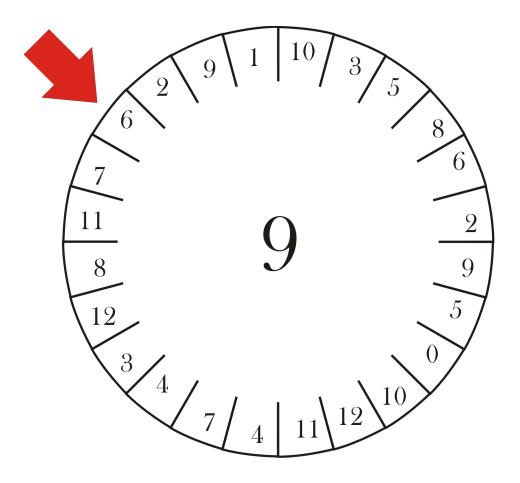


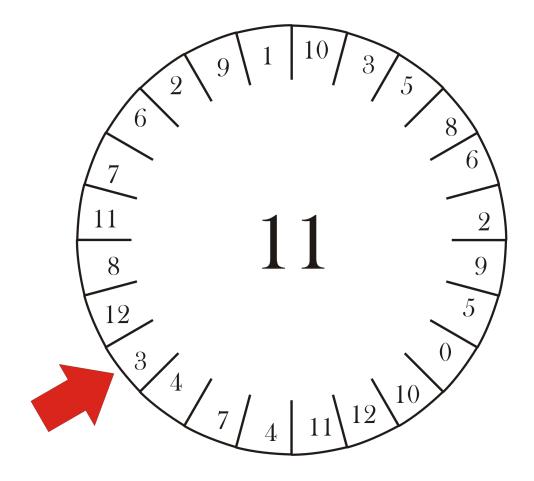


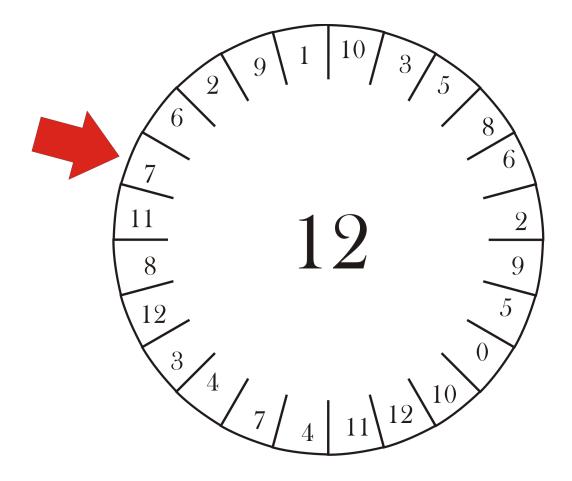












Powerline Productions





Being World Changers! Raising World Changers!



Powerline Productions exists to serve you! We want you to grow in your relationship with Jesus, experience joy and success in your homeschooling journey, and fulfill the Great Commission with your family in your home, church, and community. We offer Homeschooling books, unit studies, curriculum, one-credit high school courses, lapbooks, history parties, ladies Bible studies, God's Girls Bible studies, Real Men Bible studies, audios, and cookbooks just for you!

Our Websites

<u>meredithcurtis.com</u> <u>powerlineprod.com</u> <u>joyfulandsuccessfulhomeschooling.com</u> <u>jshomeschooling.com</u> <u>finishwellcon.com</u> <u>powerlinecc.com/</u>

Print Books Available @ amazon.com (look up Books by Title)

amazon.com/Meredith-Curtis/e/B01GOEMVUC

E-books Available at powerlineprod.com

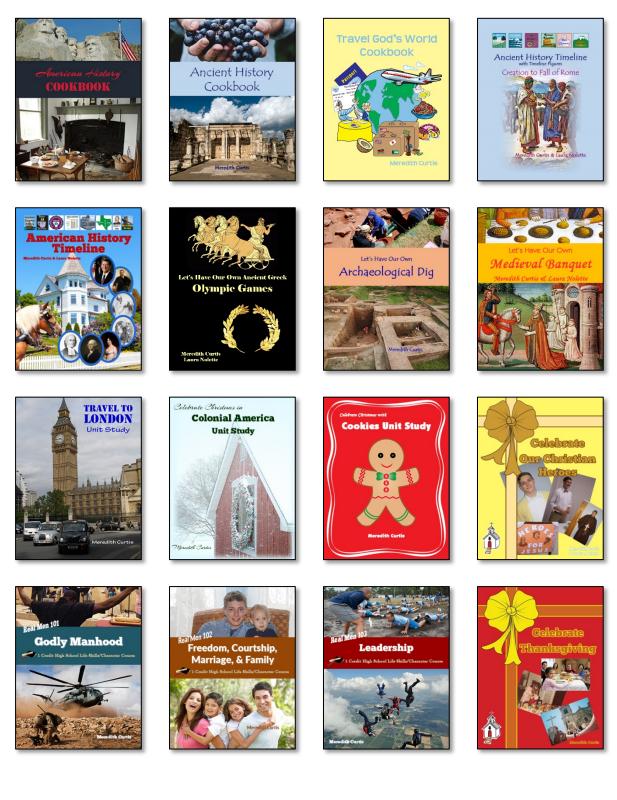
payhip.com/powerlineproductions

currclick.com/browse/pub/247/Powerline-Productions

Contact Us: Laura@powerlinecc.com & Meredith@powerlinecc.com & PastorMike@powerlinecc.com

Powerline Productions 251 Brightview Drive Lake Mary, FL 32746

Learn the Fun Way from Powerline Production



Learn the Fun Way from Powerline Production





Maggie King Mysteries

If you like cozy mysteries, you will love this series! Meet Maggie King, a pastor's wife and homeschool mom who keeps stumbling across dead bodies. With her sidekicks, Sophia and Mary-Kate and her curious children, Maggie is on one adventure after another.

