

# CIRCLE DRILL

## PURPOSE

This Mathsheets provides practice for addition, subtraction, and multiplication facts.

## PREPARATION

You need nine loonie-sized cardboard disks with the numbers '1' through '9' written on them. Loonies are Canadian one-dollar coins that are about one inch in diameter. You may wish to tape the cardboard disks to nine loonie coins which will act as a reward later on.

## PROCEDURE

Place the disk labelled '2' in the middle of the circle on the next page.

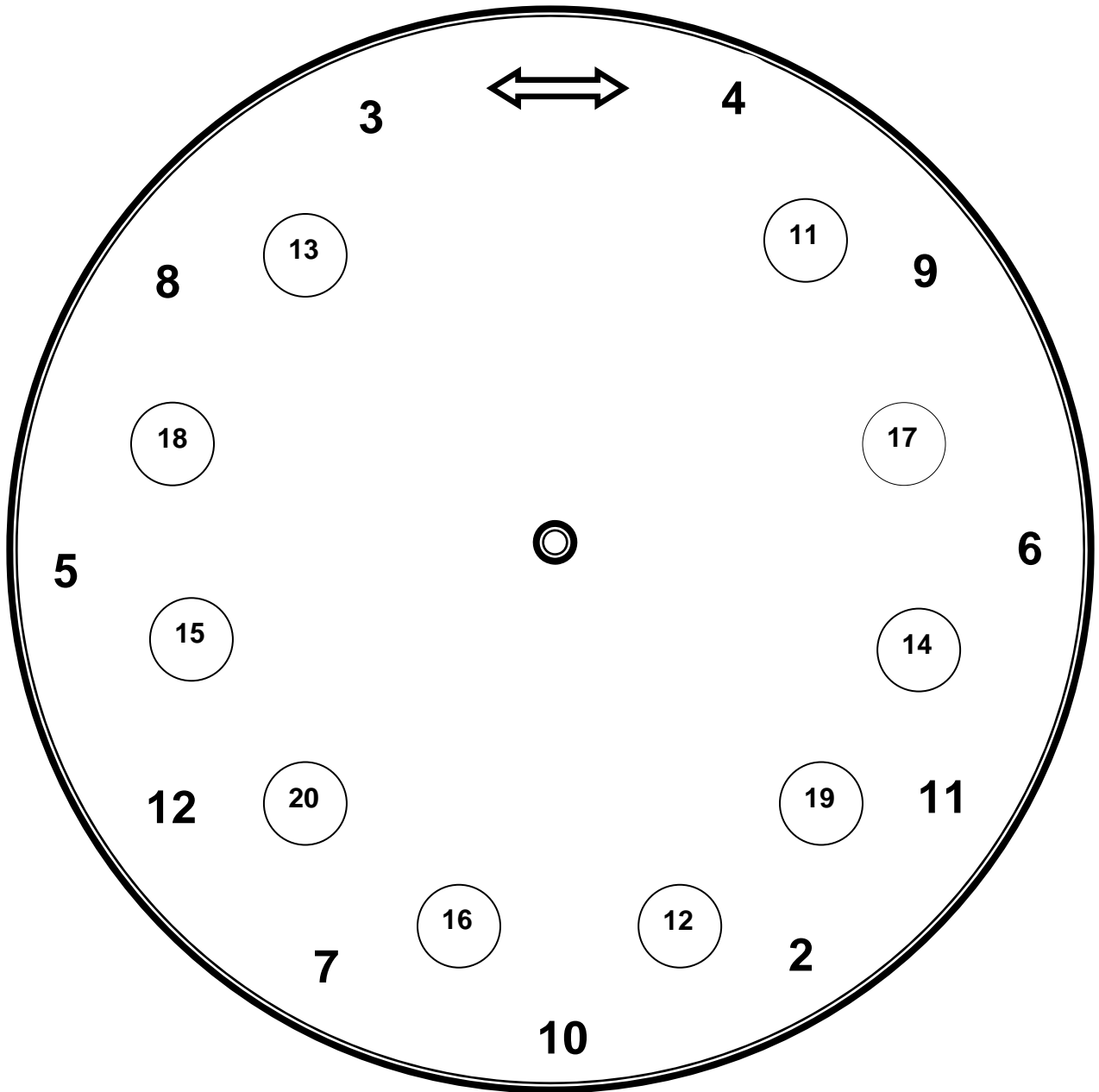
- 1. Addition with '2'.** To practise addition, point to the number '4' on the perimeter of the circle and ask your child to mentally add 2 to it and then say only the answer "six". If necessary, you can say "four plus two is what?" at first, but the goal should be that when you point to the '4', your child automatically and quickly says "six". Continue clockwise around the circle, ending with  $3 + 2 = 5$ .
- 2. Subtraction with '2'.** To practise subtraction, point to the small number '11' that has a circle around it. Ask your child to mentally subtract '2' from '11' and say just the answer "nine". Continue clockwise around the circle, ending with  $13 - 2 = 11$ .
- 3. Multiplication by '2'.** To practise multiplication, start with the number '4' and ask your child to mentally multiply it by '2' and say just the answer "eight". Continue clockwise around the circle ending with  $2 \times 3 = 6$ .

For variety, you can travel in a counter-clockwise direction, maintaining this direction for the entire cycle.

Once addition, subtraction and multiplication with '2' have been mastered, you can place the loonie or cardboard disk labeled '3' in the middle of the circle. Follow this pattern up to '9'. Learning these number facts will probably take a lot of drill, and anything you can do to increase your child's interest will be helpful.

You may wish to reward your child with the loonie once the skill level of automaticity for each number ('2' through '9') has been achieved.

# Circle Drill



Adapted from the Multiplication Circle used by David Harris' Grade 4 Teacher (1956-57)