



## Target Factor: Mastering Basic Multiplication Facts Program

Do you have students that need to master their basic multiplication facts? We have outlined a simple-to-use program using creative hands-on games through Learning Link videos to increase accuracy and speed for factors up to 12. The goal of Learning Link by Connected Class is to create partnerships between the classroom and home environment. You can use the videos in the classroom and then send them home to families for additional practice with our easy-to-use platform. This program allows you to differentiate based on need and focus on specific factors to increase math fluency.

The Target Factor Program comes with all the forms, quizzes, answer sheets, and parent communication you need to be successful. (All resources are linked below in the Materials Provided section.) It is fast and easy for the busy educator to use and generally takes only 10 minutes a week of instructional time. It begins by giving students a pre-assessment inventory to determine the factor each student needs to focus on first. You will determine the path each student will take and track their progress using the Mastering Multiplication Inventory Record Sheet. Every Monday the students will take a one-minute quiz (Form A) based on their individual needs and track their own progress. They will have a week to master that factor by playing the Target Factor Learning Link game at home with their family for at least five minutes a night. The parents will initial each week the amount of time their child played. On Friday, students will take the one-minute quiz (Form B) and track their performance. If they pass, then the following week they will focus on the next target factor. Once students have mastered factors up to 12, then they will take the post-assessment inventory and compare it to their pre-assessment. If they have obtained accuracy but their speed needs to increase, then there is an extension program outlined below with support forms and additional assessments. Students will earn a certificate once they master all their basic multiplication facts. This program length will vary in weeks needed based on individual student performance. This program can be embedded in your daily math block or center time. If you have accelerated students, challenge them with additional [Learning Link](#) videos at their academic level.

Below we mapped out the details of the program along with links to all the resources you will need. **Note:** We have provided the number 11 and 12 playing cards as a printable document for students to use.

## ***Materials Provided***

- [Multiplication 0-12 Pre-Assessment Inventory](#) (PDF)
- [Multiplication 0-12 Post-Assessment Inventory](#) (PDF)
- [Printable Number 11 and 12 Playing Cards](#) (PDF)
- [Mastering Multiplication Inventory Record Sheet](#) (PDF)
- [Multiplication Facts Class Tracking Form](#) (Excel)
- [My Multiplication Facts Progress Page](#) (PDF)
- [Multiplication Fact Quizzes](#) (PDF)
- [Target Factor Parent Letter](#) (Word)
- [Target Factor At-Home Practice Sheet](#) (PDF)
- [Multiplication 0-12 Quizzes A-D for Extensions](#) (PDF)
- [Multiplication Extension At-Home Practice Sheet](#) (PDF)
- [Multiplication Mastery Certificate](#) (PDF)

### ***How to use the program:***

#### ***Getting Started***

1. Give students the [Multiplication 0-12 Pre-Assessment Inventory](#).
2. Give each student as much time as they need to complete the test and record their time and score on the [Mastering Multiplication Inventory Record Sheet](#).

#### ***Placing Students Based on Need***

1. Determine the factor each student needs to begin with:
  - a. For example, Student A got all the zeros through threes correct, but you noticed they started getting multiplication facts incorrect when they reached the fours. That student would need to begin their individual mastery program with the fours.
  - b. For example, Student B mastered all the facts within the time you determined to be successful for your grade level. They are ready for a more challenging concept in your curriculum.
2. Once you have determined each student's placement:
  - a. Give the factor quiz for the identified level to see how many they get correct in one minute.
  - b. Have the student record the number of correct problems on the [My Multiplication Facts Progress Page](#).
  - c. Record your students' performance on the [Multiplication Facts Class Tracking Form](#).
  - d. The first week you will send home the [Target Factor Parent Letter](#) that explains the program and asks parents to play the Target Factor Learning

Link game with their child. You will also send home the [Target Factor At-Home Practice Sheet](#) for recording the time spent playing each evening and the [11 and 12 playing cards](#). Parents will return the form with their signature each Friday.

- e. Ideally, students will play Target Factor for at least 5 minutes at home each night.
- f. On Friday give students the posttest for their identified factor. The [quizzes](#) are provided for you in the Teacher Resource section of Learning Link on Connected Class. If students pass, the following week, they will work on the next target factor. If they don't pass they will repeat the same target factor again.
- g. Identify the target factor for the following week and list it on each student's [Target Factor At-Home Practice Sheet](#).
- h. Repeat this process with each student until they master all the multiplication facts up to 12.
- i. Once they have mastered all the facts, then have them take the [Multiplication 0-12 Post-Assessment Inventory](#) to evaluate their speed. At this point, they should have 100% accuracy but may need additional practice to build their speed. You will determine the goal for the number of problems correct per minute based on your grade level. If students are struggling with speed, then have them go to the program extension below. If they mastered accuracy and speed, then award them with the [Multiplication Mastery Certificate](#).

### ***Program Extension***

If you have students that need to build speed for all the basic facts, then have them play [Multiplication War](#) and [Multiplication Madness](#). Have the students add the number [11 and 12 playing cards](#) to their playing decks for those two games. You can use the [Multiplication Extension At-Home Practice Sheet](#) to track the amount of time students are playing at home with their families. Use the [Multiplication 0-12 Quizzes A-D](#) for additional assessment. Once the student has reached the predetermined goal, award them with the [Multiplication Mastery Certificate](#). Periodically, have students play [Multiplication War](#) and [Multiplication Madness](#) to maintain their accuracy and speed.