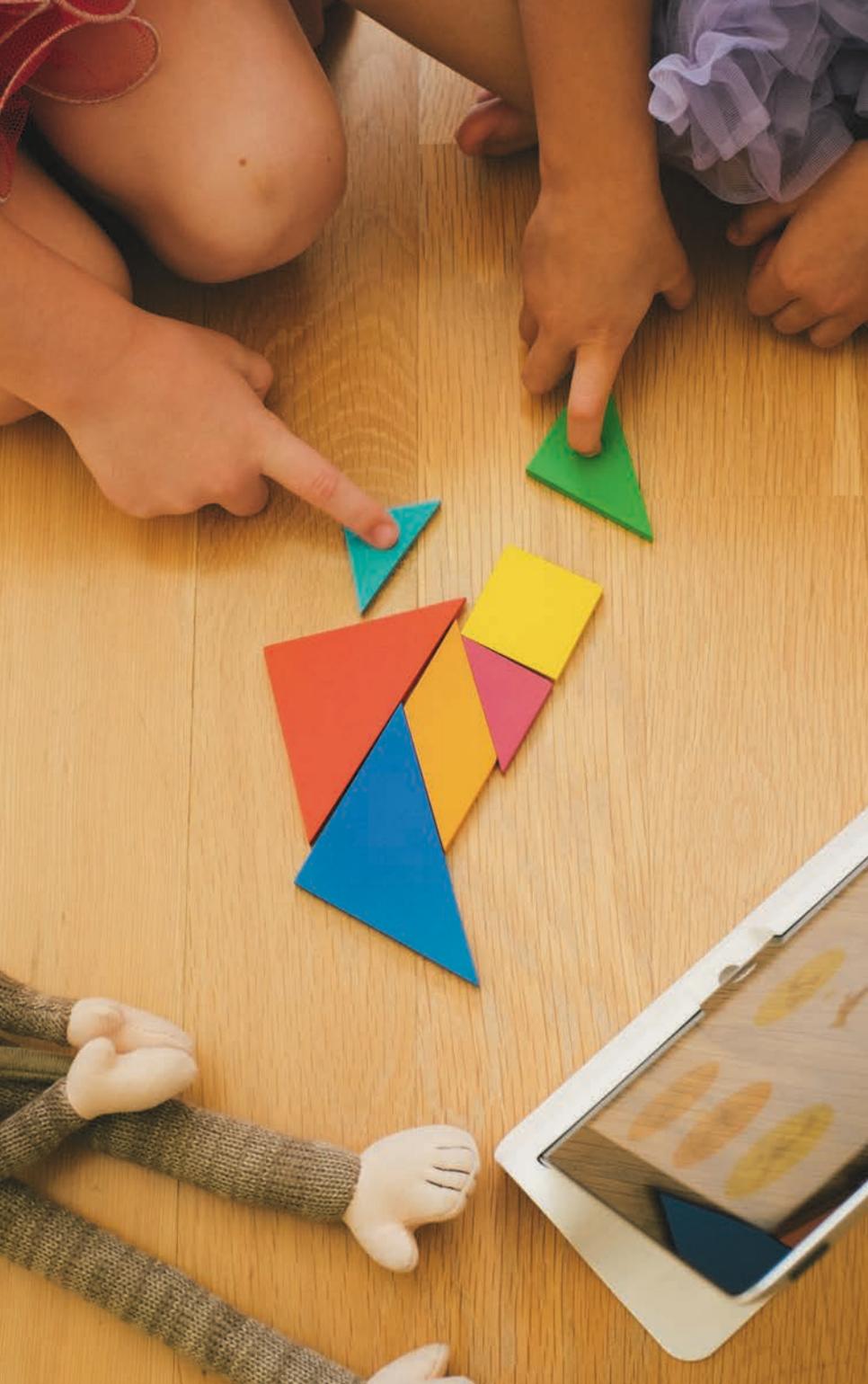# Osmo

# TEACHER'S GUIDE

# Hello!

Thanks for your interest in Osmo for the classroom!

**Osmo** is an accelerated learning system that uses an iPad, physical objects, and educational tools to keep kids engaged in learning and build their confidence through hands-on play.

Teachers love Osmo's versatility in the classroom and the way it fosters student learning in key areas like social- emotional, creative-thinking, STEM, and Common Core. More than 15,000 schools are using Osmo to learn and play every day.

We've carefully crafted this kit to help you better integrate Osmo into your classroom with both ease and fun. We hope you enjoy!

# What's included in this
# Teacher's Guide

# Getting Started

## Where does Osmo fit in education?

Here are examples of types of programs where Osmo is being used to help children learn and play.

- Elementary classrooms, grades K-6
- Library / media center
- Homeschools
- Special needs classrooms and programs
- Afterschool programs
- Technology clubs
- STEM curriculum
- Gifted programs
- Community centers
- Makerspaces
- Tutoring
- School therapists / social-emotional learning settings
- Speech and occupational therapy clinics
- Camps

## Purchase Information

To buy additional Osmo systems, visit:
**playosmo.com/schools**

For bulk order discounts or to use a purchase order, contact:
**schools@playosmo.com**

## Set-Up

Setting up is easy, refer to the "Getting Started" section on the "Welcome to your Classroom Kit" brochure.

You can also check out: **playosmo.com/start**

## Help and Support

Contact us anytime. We love hearing from you.

General Support Email: **osmo@playosmo.com**

General Support Phone: (408) 641-0044

Education or volume purchase:
**schools@playosmo.com**

Twitter: @playosmo

# Words
## for every curriculum

**Osmo Words** is a fun problem-solving tool that helps students practice spelling, vocabulary and critical thinking. There is a fun team play mode which allows two teams of up to four to play on a single iPad. Also, it is customizable for any classroom - adding your class vocabulary or spelling lists is easy!

**Create custom Words albums with myOsmo**

1. **Register** at **my.playosmo.com**

2. Go to **myWords**

3. Click **"Create New"**

4. **Upload** your desired photos

5. **Add** word choices for each photo

6. To make letters visible, enclose them in **parenthesis** like this: (moo)se

7. Once you are finished, go to your iPad and log in to myWords

8. Click on the album you have just created and click **"Download to iPad"** in the upper right corner

9. Congratulations! You can now play your custom Words album on your iPad

# About Our Class

By Jennifer A., Montclaire Elementary School

**Grades**

K-6

**Environment**

Students are split into two groups with least 6 students per iPad

**Materials**

- Osmo Learning System
- Osmo Words App
- 2+ iPads

**Objective**

Help students get to know each other and become acquainted with a new classroom or school. Students practice spelling and sounding out words they hear collaboratively.

**Variation**

Project the game using Apple TV and have students play as one group, alternating turns for letters.

For younger students, teachers create the album.

**Activity**

**Part 1**

1. Divide students in two groups, one iPad for each group.

2. Each group starts off by taking photos of each other with the iPads (with the teacher's help).

3. Students login to **my.playosmo.com/words** for creating a new album. Click 'Create your own.' Then, upload the photos to Words game and input the spelling of their names.

4. Extra Bonus: Students can upload a photo of their favorite animal or a place they've visited. This process gets students talking and learning about the preferences of each other.

**Part 2**

1. Set up multiple stations and form groups of students. In each Words app, click on "Download to iPad" to start playing your own album.

2. Students then work together to figure out and spell the keyword.

# Real-time feedback

## with

# Tangram

The game Tangram was invented in Imperial China over a thousand years ago. **Osmo Tangram** allows directed or open-ended play with this classic puzzle.

Each Tangram set contains 7 shapes that are based off mathematical ratios. These 7 shapes can individually interact with the iPad to give students real-time feedback on their puzzles.

By arranging the shapes to match on-screen shapes, students help rescue prisoners and unlock new levels. Levels range from easy (purple) to very hard (red). Students can play with a partner or independently.

Tangram helps students develop visual spatial abilities, nonverbal reasoning, fine motor skills, and executive functioning.

# Discovering Shapes

By Osmo

## Grades

Pre-K / 1st

## Environment

Individual station, Groups of 2-3, or whole class using projector

## Materials

- Osmo Learning System
- Osmo Tangram App
- Tangram Pieces
- iPad 2 or higher

## Objective

Familiarize your students with shapes, colors, and exciting puzzles with this lesson.
This is a great introduction to Osmo Tangram and the art of Tangram for beginner learners.

*CCSS.MATH.CONTENT.K.G.A.1*
*CCSS.MATH.CONTENT.K.G.A.2*
*CCSS.MATH.CONTENT.K.G.A.3*
*CCSS.MATH.CONTENT.K.G.B.6*
*CCSS.MATH.CONTENT.1.G.A.1*

## Activity

1. Have your students start either individually or together on 'Introduction to Tangram.' The game will lead them through 13 puzzles starting with two shapes and ending with six shapes. Go around asking students to identify the shapes and colors. If you'd like, you can go through 'Introduction to Tangram' together as a class by playing it on the projector.

2. Then play 'Tangram' and choose 'Easy.' Students will journey the Tangram world by solving animal puzzles that will eventually take them to the castle, which contains three puzzles of either humans or objects. Unlocking a castle will give them a treasure chest filled with extra hint points!

3. Throughout the lesson, ask students to identify shapes, colors, and the bigger shapes that two smaller shapes come together to create. Look out for the orange parallelogram - the trickiest shape!

# STEM
## learning with Newton

In **Osmo Newton,** students apply physics and engineering skills to guide falling on-screen balls into targets.

Newton can be played by drawing on paper or with any physical object around the classroom (even hands!).

Students can either partner up, play as a group, or play individually.

Newton challenges students as they progress with bouncing balls, accelerating platforms, and fans that will encourage collaboration and creative problem-solving.

# Engineering Solutions

By Osmo

## Grades

4th / 5th / 6th

## Environment

Small groups (Maximum 3 students per iPad)

## Materials

- Osmo Learning System
- Osmo Newton App
- iPad 2 or higher
- A variety of objects from the classroom

## Objective

Students will discuss properties of Newton and work collaboratively to solve engineering puzzles.

## Activity

### Part 1

1. Demonstrate Osmo Newton. Students will gather around an Osmo and iPad station, or you can use a projector to demo the game.

2. Set up multiple stations of Newton and form groups of students.

3. Groups will be instructed to choose objects from around the classroom for their classmates to try and solve Newton puzzles. Ideas: math tangibles like base 10 blocks, paper and scissors to make cut out shapes, Tangram pieces.

4. Using a piece of paper, students will write down why they chose the items they chose, and rate the difficulty of using this object on a scale of 1-5. (Will set this aside for later.)

### Part 2

1. Students rotate through each station, playing the game using tangible objects that were chosen by classmates.

2. After each station, the students also rate the difficulty on a scale of 1-5.

3. Once rotations are complete, have a class discussion about why they chose the objects they did and the perceived difficulty level. Bonus: Students can brainstorm possible objects to use for a subsequent lesson.

# Masterpiece for art education

**Osmo Masterpiece** is an imaginative drawing tool that helps students gain confidence, a sense of proportion, perspective, and fine motor skills.

By displaying images simplified to line drawings, students are able to draw on paper what they see on screen.

Masterpiece can also be used for handwriting practice or even learning new languages, like Chinese!

Students can choose from a range of curated gallery content or create their own by taking a picture of something (or someone!) they want to draw.

Masterpiece is a terrific aid for everything from book report covers to presentation drawings. At the end, a drawing time-lapse and the final masterpiece can be easily shared with the class, family, or friends.

# Writing My Name

By Osmo

## Grades

Pre-K / K

## Environment

Individual station *For this activity, we recommend adult supervision

## Materials

- Osmo Learning System
- Osmo Masterpiece App
- iPad 2 or higher
- Writing utensil(s)
- Name tag cutouts on construction paper
- Each student's name printed largely on a separate sheet of paper

## Objective

Students will learn to write their names and create their very own nametag.

*CCSS L.K.1.A*
*CCSS L.1.1.A*
*CCSS L.1.2.A*

## Bonus Lesson

Students can also trace individual letters of their names by using the print uppercase and lowercase letter templates in the Misc. gallery of Masterpiece.

## Activity

Have a group discussion about names and how important it is to have names on things and be able to read each other's names.

1. Separate students into groups of 2-3 with set of supplies at each station.

2. Give each station a mini-demo about taking a photo with Masterpiece and then pressing the green button to start drawing.

3. Then, have each student take a photo of their names with Masterpiece. Instruct the class to then place the iPad back onto the Osmo base and start tracing!

4. You can have students first practice for 5-10 minutes on regular paper. Once they are ready, they can write their name onto the actual nametag cutout with markers or crayons.

5. When they are done, tell them to click the tiny check button in the lower right of the screen and then the green button. Watch their reaction as they watch a timelapse video of them writing their names!

6. You can then send each child's video to yourself or their parents by clicking 'Share' or just save it to the iPad camera roll.

# Draw a Self Portrait

By Osmo

## Grades

3rd / 4th / 5th / 6th

## Environment

Individual or station *Max 1 student per iPad at a time

## Materials

- Osmo Learning System
- Osmo Masterpiece
- iPad 2 or higher
- Paper + drawing utensils

## Objective

Students draw portraits of themselves using a photograph as a guide.

## Activity

In this workshop, students will get to experience the process of taking a photo of themselves and sketching out their own self portrait.
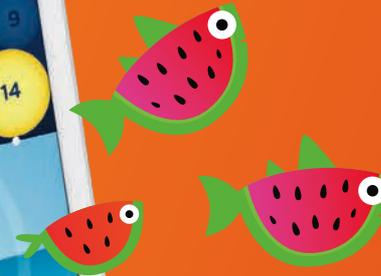
1. Each student gets their own iPad.

2. Assisted by a teacher or classmate, students will start by taking a photo of themselves with the iPad, making sure it saves to camera roll.

3. Teacher will demonstrate the process of choosing an image to draw from the camera roll and changing the visible lines. (Students will gather around an Osmo and iPad station, or you can use a projector for the demo.)

4. Students go back to stations to begin tracing their photo and drawing a self portrait.

# Flexible math learning

## with __Numbers__

With **Osmo Numbers** you'll not only pick the number you'll solve for, but how you'll solve for it. When kids get the idea that there are multiple good ways to solve a problem, math becomes creative and fun.

# Playing with Counters

By Osmo and Houghton Mifflin Harcourt

## Grades

2nd / 3rd

## Environment

Individual stations, Groups of 2-3, Classroom with projector

## Materials

- Osmo Learning System
- HMH red/yellow counters
  * Not included in Classroom Kit, can be found in any school supply store or Amazon
- Osmo Numbers app
- iPad version 2 or later

## Objective

This lesson coincides with 3 levels of Osmo Numbers: Blenny Bay, Clownfish Coast, Betta Bluff, Butterfly Beach, Seahorse Strait. As children build numbers using referent numbers, they find various ways to represent the numbers and develop strong number skills.

CCSS: *2.OA.2*
*Mathematical Practices:*
*MP.1*
*MP.2*
*MP.4*
*MP.5*
*MP.7*

## Activity

Set up Osmo station(s) and introduce the counter tiles to students; a red counter represents the number 5 and a yellow counter represents the number 1.

1. Open the Numbers app and go to the Settings menu.

2. Click on the gear icon on the upper left of the game screen. Check at the bottom of the screen to make sure "Extra Input" is enabled.

3. Go to the main menu and locate the COUNT section.

4. Select the fourth level: Blenny Bay

5. Using the counters, students will build numbers 14 through 24 seen in the bubbles that are closest to the water on the screen.

6. As students build numbers correctly, the bubbles will pop and they will earn achievements and move to other levels with greater numbers. As an aide, they will get real-time feedback about their work at the bottom of the screen.

7. While the children are playing the game, discuss the strategies they use to make decisions. Promote discussion by asking "Why did you build the numbers using those counters?" or "If you had built the number in a different way would your score be better or not? How do you know?"
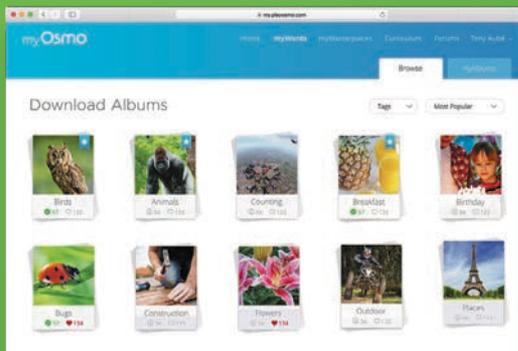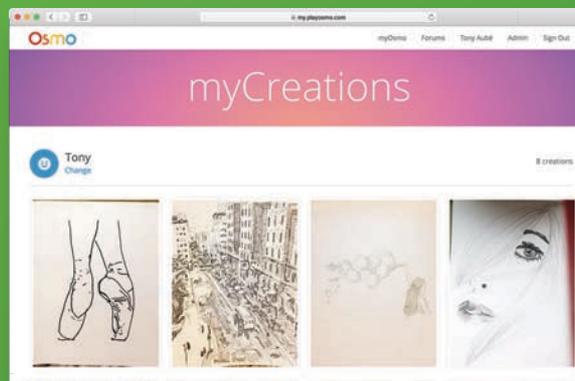
# Introducing myOsmo

**About myOsmo**

myOsmo accounts allow you to personalize the Osmo apps for your use. You can create multiple student profiles so players can save their progress in each app individually.

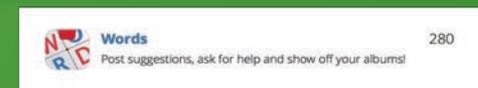With accounts, student progress is stored and automatically synchronized between devices.

**myOsmo Setup**

Create an account at **my.playosmo.com**. You will receive a unique 8-digit Activation Code. This code is used the very first time you connect a new device to your account.

**Manage multiple users**

To get started with multiple users, you will first need to create an account at **my.playosmo.com**. Accounts allow you to create a profile for each user, linked under that account, that can play within the apps. At any point you can edit them (or delete them if you they are no longer required) from your myOsmo home page when you are signed in. After setting up your **my.playosmo.com** account and connecting a device, you can create as many profiles as needed for the students in your classroom.

download and create Words albums

save and share Masterpiece drawings

engage with the Osmo community

# Join our
# Osmo Ambassador
## Community

The Osmo Ambassador Program is a growing community of passionate educators who love sharing their experiences while teaching with Osmo.

The program is open to any educator using Osmo that wants to earn rewards, connect with others, and help shape the direction that Osmo takes for education.

To join, first take a look at the requirements:

- Get featured in a press story about using Osmo in the classroom
- Lead a grant or purchase order for your school
- Contribute featured lesson plans to myOsmo
- Present Osmo at a conference or event

After you complete the requirements, go to myOsmo to fill out the application.

Approved Ambassadors will receive the following rewards in their welcome kit:

- Osmo T-shirt
- Coupons for online ordering at **playosmo.com/schools**
  *Restrictions may apply*
- Ambassador badge, stickers, pens, iPad cases, and other fun goodies
- Beta testing opportunities and other special opportunities to be involved in the future of Osmo for education.

Questions can be directed to **schools@playosmo.com**.

U.S. only

# More from the Osmo Family

## Monster

Bring your drawings to life with **Osmo Monster**! Each item you draw will be magically pulled into Mo's world. Together create animated activities to share!

## Coding

Explore, discover, and master the basics of programming with **Osmo Coding**. Use block-based coding to explore Awbie's world in a fun and surprising adventure!

Osmo is always coming out with new learning apps. Learn about the latest at

**playosmo.com/schools**