

TEACHER'S GUIDE TO

Osmo





Hello!

Thanks for your interest in Osmo for the classroom!

Osmo is a learner-led iPad game system that uses physical objects and learning tools in conjunction with iPad. 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.

We created the content below specifically with educators in mind. We understand that it can be overwhelming to adopt new technology and we want to make it simple for you to integrate Osmo applications into your work.

For answers to common questions, check out this [quick guide](#).

What's included in this Teacher's Guide

Getting Started	p. 4
Intro to Words, Tangram, Newton, Masterpiece.	p. 5
Classroom Ideas	p. 9
Your Classroom, Your Osmo: Using custom Word albums in the classroom.	p. 10
Social-Emotional Learning: First Day of School / About Our Class	p. 11
Reading and Spelling: Literature Review	p. 12
Math and STEM: History of Tangram and exploring shapes.	p. 13
Math and STEM: Collaborative problem-solving with Newton.	p. 14
Art: Draw Chinese characters.	p. 15
Art: Self-Portrait	p. 16



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
- Homeschooling
- Special needs classrooms and programs
- Afterschool programs
- Technology clubs
- STEM curriculum
- Gifted programs
- Community Centers
- Maker Spaces
- Tutoring
- School therapists /Social Emotional Learning settings
- Speech and Occupational therapy clinics
- Camps

Purchase Information

To buy Osmo, visit www.playosmo.com.

For bulk order discounts or to use a purchase order, contact. Schools@Playosmo.com.

Set-Up

Once you have Osmo, setting up is easy and you'll find an instruction guide within each package.

You can also check out www.playosmo.com/en/start/

Help and Support

Contact us anytime. We love hearing from you.

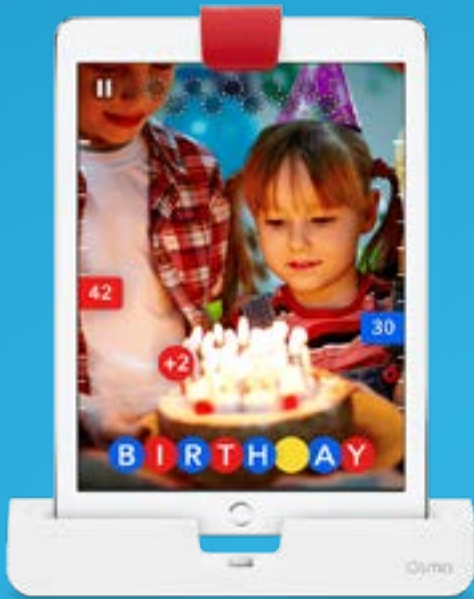
General Support Email:
Osmo@playosmo.com

General Support Phone:
(408) 641-0044

Education or volume purchase:
Schools@playosmo.com

Twitter: [@playosmo](https://twitter.com/playosmo)

Introduction to Words, Tangram, Newton, Masterpiece



Words game for every curriculum.

Osmo Words is a fun problem-solving game that helps students practice spelling and critical thinking. It is customizable for any classroom which makes it the most versatile of all the apps because content vocabulary and specific spelling lists can be added. Students and teachers can become the game makers. Words provides an opportunity to practice teamwork skills because it can be effectively played by 2 teams of 4 students using a single iPad. It makes a great teaching tool for younger students and a fun review game for older students.

Modes

Strategic Thinking: Pre-populated list of nearly 1000 words and images available.

Inspired by Common Core spelling lists.

Pre-Loaded albums: Fruits & Veggies, Colors, Animals, Counting, Biomes, Recycling, Rocks & Minerals, Cloudy with Meatballs, Lilly's Purple Purse, Parts, Little Engine That Could, Goodnight Moon, Guess How Much I Love U, Short A 3-letter, Stellaluna, Baby Animals, Short A 4-letter, Short A 5-letter and more!

Spelling: Specifically designed for beginning readers, ages 4-5. Inspired by Common Core spelling lists.



Real-time feedback with Tangrams.

Tangrams have challenged the minds of millions for centuries. **Tangram for Osmo** still uses classic wood puzzle pieces that interact with the iPad to give students real-time feedback. This game develops visual spatial abilities, nonverbal reasoning, fine motor skills, and executive functioning. Instant visual and auditory feedback promote self-correction and a sense of mastery, helping students build spatial relational skills.

Visual: Color recognition, pattern recognition, flipping / turning, 3D thinking, spatial relational, geometry.

Extensive: Advance and unlock over 600 challenging puzzles.

Collaborative: Students can help each other solve challenges.

Modes

Classic: 600 puzzles with 4 levels of difficulty - each puzzle uses all 7 tangrams.

Junior: 1 level of difficulty - each puzzle uses < 7 tangrams.

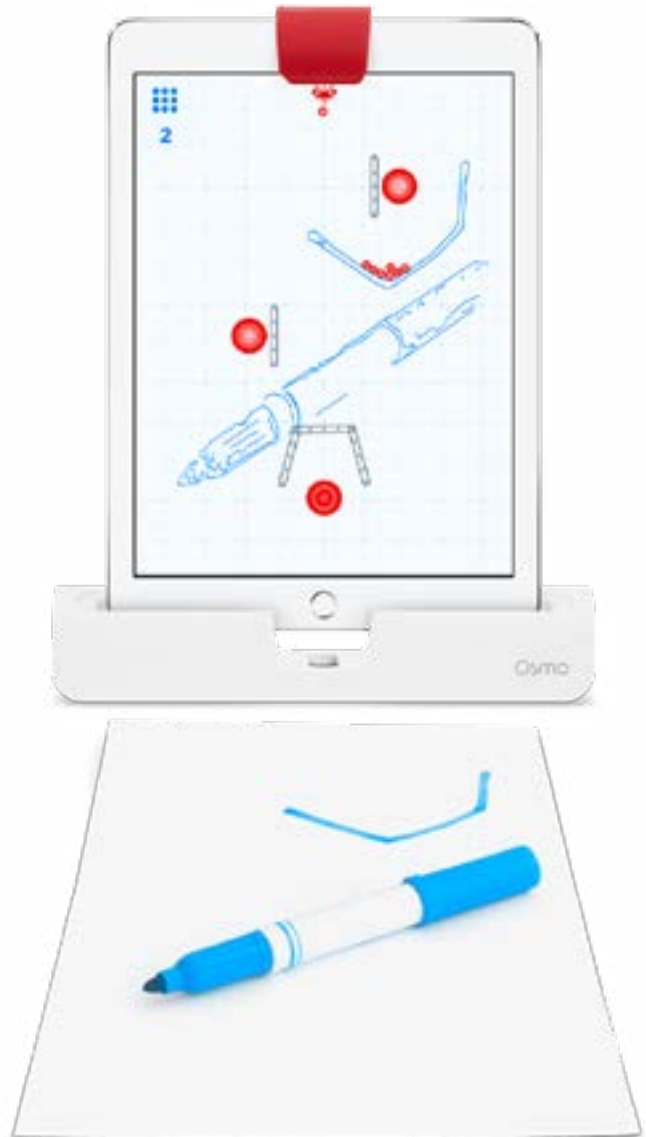


STEM learning with Newton.

Osmo Newton allows you to use real life objects around you (i.e. paper and pen) to create structures that magically become part of the Osmo Newton gameplay. Advance through engineering design challenges by manipulating physical objects so that falling drops hit the targets while getting real-time feedback. Unique open play experience fosters creativity and problem solving at the same time. Students are exposed to physics and engineering concepts by predicting where the drops will bounce, estimating distance, and building structures to change the path of the drops so they hit the targets. There are limitless ways to win, allowing students to create without guidelines - a perfect fit for STEM and Maker movements. Also collaborative, students have fun helping each other to solve tough challenges.

Modes

Classic: 60 levels with increasing difficulty.





Masterpiece for art education.

Masterpiece is a drawing tool that's perfect for art class but also useful across other curriculum for creative projects like book reports and presentations. Fostering imagination and building confidence in creative work, students can draw anything they can imagine. Images are captured via camera or pulled from an internet search, making Masterpiece a modern drawing (or coloring) book. Masterpiece also allows multiple objects from the physical world and digital world (online images) to be combined to create completely new compositions. It nurtures spatial intelligence and builds confidence over time and is a great practice tool for drawing proportions. For young students, drawing can be a roadblock to self-confidence. Now students can feel good about their work. Also collaborative, Masterpiece makes an amazing time-lapse video of each of your drawings that are a fun and unique movie for you to share with friends and family!

Modes

- [Infinite Library](#)
- [Camera capture](#)
- [Video Capture](#)



Classroom Ideas

Here are some Osmo lessons you can do in the classroom!

Your Classroom. Your Osmo

Using a Customizeable Words album in the classroom. (Grades K-5)

Social-Emotional Learning

First Day of School / About Our Class. (Grades K-5)

Reading and Spelling

Literature Review. (Grades K-3)

Math and STEM

History of Tangram and Identifying shapes. (Grades K-5)

Collaborative Problem-Solving with Newton. (Grades 3-5)

Art

Chinese Characters with Masterpiece. (Grades 3 and up)

Draw a Self-Portrait. (Grades 3 and up)



YOUR CLASSROOM, YOUR OSMO

Using a custom Words album in the classroom.

Grades

K-5

Environment

Individual station, small group or large group.

Materials

Osmo base + Words for Osmo pieces + App + iPad (s).

Internet access and login for my.playosmo.com.

Objective

Make Osmo a regular activity for reviewing class concepts. Get inspired with pre-loaded content:

- Early Learning: Fruits & Veggies, Colors, Animals, Counting.
CCSS.ELA-LITERACY.RF.K.1 (K-1)
- Phonics: Short A 3-letter, Short A 4-letter, Short A 5-letter.
CCSS.ELA-LITERACY.RF.K.2. (K-1)
CCSS.ELA-LITERACY.RF.K.3.
CCSS.ELA-LITERACY.RF.K.4
- Science: Biomes, Recycling, Rocks & Minerals. (Grade -3-5)

Activity

Part 1 - Before the Lesson

Pick a concept and create a vocabulary review or spelling game. Students can create albums, too. Here are some ideas:

- Weekly spellings lists.
 - Social-Emotional Learning: Friends, Faces.
 - Science concepts: Biomes, Recycling, Water Cycle.
 - History topics: Presidents, Monuments.
1. Identify at least 20 keywords to include in the album.
 2. Collect images that correspond with key words. (From your digital photo album, google images, or stock photographs.)
 3. Begin making a custom album: Go to my.playosmo.com/words. Click "Create your own." Upload a picture and click on it when it is done uploading. Input words and choose their difficulty levels. Repeat steps 5 and 6 until your album is complete. Kids can review concepts independently or collaboratively.
- ### 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 guess and spell the keyword.



SOCIAL EMOTIONAL

First Day of School / About Our Class

Grades

K-5

Environment

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

Materials

Osmo base + Words for Osmo app
+ at least 2 iPads

Objective

To help students get to know each other and become acquainted with a new classroom or school. Students practice spelling / 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

Students get acquainted with the new school year by learning about their classmates and school environment using Words game for Osmo.

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 self 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 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.



READING & SPELLING

Literature Review

Grades

K-3

Environment

Individual station, small groups (2-3 students per iPad) or whole class using projector.

Materials

Osmo base + Words for Osmo app + iPad

Objective

Using framework of Common Core, students will learn new concepts from class literature.

- CCSS.ELA-LITERACY.RL.K.1
- CCSS.ELA-LITERACY.RL.K.3
- CCSS.ELA-LITERACY.RL.K.4
- CCSS.ELA-LITERACY.RL.1.4
- CCSS.ELA-LITERACY.RL.1.7

Activity

In this lesson, students will use Words game for Osmo to learn and review book concepts picked by the the instructor, using the framework of Common Core.

Part 1 - Before the lesson

1. Choose a book and create a list of keywords and find high resolution images that correspond with the words. (Bonus: Instead of photographs, have students draw story elements using Masterpiece for Osmo.)
2. Go to my.playosmo.com/words.
3. Click "Create your own." Upload a picture and click on it when it is done uploading. Then, input words and choose their difficulty levels.

Part 2 - Once students have completed reading the book.

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 work together to problem-solve and spell concepts from the story.
3. Bonus: Check out a few examples that we've done for inspiration: Cloudy with Meatballs, Lilly's Purple Purse, Parts, Little Engine That Could, Goodnight Moon, Guess How Much I Love You and Stellaluna.



MATH & STEM

History of Tangram and Identifying Shapes

Grades

K-5

Environment

Small Group (2-3 students per iPad)

Materials

Grandfather Tang's Story + Osmo base + Tangram pieces + app + iPad
(Optional - Apple TV to be used as Osmo projector.)

Objective

Identify and describe shapes using the framework of Common Core:

- *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

In this lesson, students will be introduced to Tangram and Tangram for Osmo.

1. Read aloud Grandfather Tang's Story and explain to students that a tangram is an ancient Chinese puzzle.
2. Demonstrate Tangram for Osmo. Students will gather around 1 Osmo and iPad station, or teacher can use a projector for the introduction.
3. Introduce the 7 tangram pieces, counting the number of sides they have to practice Common Core Standards.
 - 2 large triangles - red and blue
 - 1 medium triangle - green
 - 2 small triangles - purple and teal
 - 1 square - yellow
 - 1 parallelogram - orange
4. Set up multiple stations of Tangram for Osmo and form groups of students. Students collaborate and take turns solving the puzzles.



MATH & STEM

Collaborative Problem-Solving with Newton

Grades

3-5

Environment

Small groups. (Maximum 3 students per iPad.)

Materials

Osmo base + Newton for Osmo app + iPad. A variety of objects from the classroom.

Objective

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

Activity

In this lesson, students will be introduced to Newton for Osmo and will explore properties of the game by creating engineering puzzles for their peers.

Part 1

1. Demonstrate Newton for Osmo. Students will gather around 1 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.



ART

Draw Chinese Characters with Masterpiece

Grades

3 and up

Environment

Small group (Maximum 2 Students per iPad.)

Materials

Osmo base + Masterpiece for Osmo app + iPad. + paper + drawing utensils. Optional: Any Chinese language textbook.

Objective

This activity is appropriate for a art, language class, or as an activity station. Students will learn to write different language characters for the first time or or skilled students can deepen their practice and create compositions.

Activity

Students will use Masterpiece for Osmo to make Chinese language characters.

Part 1 - Before the Lesson

1. Search the web for “Chinese character practice sheets generator” or take a photo of a practice sheet using your textbook.
2. Once you’ve found the practice sheet (s) you’d like to use for the lesson, send the image to each iPad’s camera roll.

Part 2 - With Students

1. Demonstrate Masterpiece for Osmo. Students will gather around 1 Osmo and iPad station, or you can use a projector for the demo.
2. Students are instructed to open Masterpiece, go to the Camera Roll and select the practice sheet.
3. Instruct students to grab a pen and paper and begin tracing the strokes on Masterpiece.
4. Bonus: If you need help remembering what a set of characters means, after you’ve finished practicing it, you can draw a picture that represents the meaning to you.



ART

Draw a Self Portrait

Grades

3 and up

Environment

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

Materials

Osmo base + Masterpiece for Osmo app + iPad. + 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 self-photo and sketch 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 selfie 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 1 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.

Thanks for supporting
Osmo in the classroom.



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[@playOsmo](#)