# Editable fact practice games for school or home



ADDITION K.I.T.S.

by Angela Watson

The full PDF is 67 pages and contains directions, game boards and game cards, and KIT labels (small and large, black and white + full color). Here are the pages in the PDF. Full size sample pages follow.



The download also includes a 31 page editable Word document which has the KIT recording skeets with printable directions. You get a set of KIT directions designed for students 1-10, 11-20, and 21-30, plus recording sheets for the two alternative KIT ideas.

A sample page from the Word document is included on the next page in this preview.

# KIT (Kids Into Thinking) RECORD SHEET

# KIT #4 Spill It

A math KIT like this one will be sent home on the last day of each week. The KIT will contain hands-on materials for practicing addition facts in a game format. Keep the KIT for the entire week to help prepare for your addition tests. This KIT must be returned the following week so a new KIT can be taken home. Students who do not return KITs or return them with missing or damaged pieces may not be allowed to check out any more KITs. Using the KIT is optional but lots of FUN—share it with your family and see how your math skills improve!

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ATERIALS IN THIS KIT: game board, 2 buttons

#### **DIRECTIONS FOR THIS KIT:**

Roll the two buttons onto the game board (or put them in a cup and shake it, then roll.) Add the numbers the buttons land on. If the button is close to a line, you can roll again or choose the closest number. Take turns playing, going as fast as you can. To make the game more challenging, write down each amount that you roll and add the numbers up. (For example, if you roll 3 and 7, write down 3+7=10. On your next turn, if you roll 4+5, write down 4+5=9 and add 10 and 9 together.) The first person who gets to 50 wins the game!

# FAQs About KITs

#### Why do students need math KITs?

Most teachers focus on higher-level thinking activities in class and have little time they can dedicate to rote fact practice and memorization. And yet we know that students aren't going to get proficient with addition facts unless they study and practice, and the Common Core State Standards (CCSS) place strong emphasis on speed and accuracy with core math facts.

Memorizing facts often becomes a homework task, and it's tough to get students engaged in it. Few students have the self-discipline to drill themselves with flash cards. Computer-has d fact practice is good, but not all students have access to computers and high speed internet.

I created the KITs to provide a fun way for students to practice math facts at Pome. It's something enjoyable they can do with their parents as a family (or with siblings, cousins, neighbors, or friends.) As teachers, we can't force kids to memorize math facts, but we can support our students in every possible way and make it as easier for them.

I provided math fact flashcards and website recommendations to my student, and then sent home KITs for ten weeks so that the children had lots of options for learning their races.

# What age groups and grade levels are the KITs designed for?

The addition KITs are designed for students in grades 1-4 (a.65.6-10). The majority of the games allow for differentiation so that students can participate in halder or easier versions, depending on how many addition facts they practice and what numbers they practice.

A note about using the KITs with 6-2 year olds: I would recommend waiting until the latter half of the school year before introducing the KITs, and make Jure to teach students how to play the games before sending them home. First gradies will need a little more assistance filling out the record sheets and checking out KITs, and will probably not be able to read the directions themselves. You should also be prepared to help second cradies read and comprehend the game directions.

#### What materials are needed?

The games use simple, inexpensive or free, easy-to-obtain materials. You will need to make a minimal amount of photocopie.

#### Which skills can be practiced with KITs?

The KITs in this download are designed for addition facts. (You can purchase my multiplication KITs, as well.) Each KIT can be used for one or more set of facts (such as 6s, 7s, and 8s) at a time, depending on which flashcards and materials are chosen by the student.

#### What containers do I need?

To hold the KITs, I used zip-close baggies for the smaller materials and the boxes that Scholastic book orders come in to keep the whole KIT together. Instead of the book order boxes, you could use shoe boxes, plastic containers or tubs, mini backbacks, tote bags, or anything else you have available.

#### How do students use the record sheets?

The KIT directions/record sheets are included in your purchase as an editable Word document. I printed the forms and stuck them inside the KITs with the materials that are listed on the forms. Since I had 20 students and only 10 different KITs, I made two of each KIT. Students #1-10 shared one set of KITs, and students #11-20 shared the other set of KITs. If you have more than 20 students you could make additional KITs using other math games you have or make a third set of the games for students #21-30 to share.

#### How do you distribute and collect the KITs each week?

Each Friday, my students returned their old KIT and signed out a new one. I called 10 students at a time over to a table (specifically, the ten kids who shared one set of KUs, so #1-10 at at once and then #11-20 all at once). Then I quickly checked to make sure no materials were missing or damaged, and let them pick out new KITs from the selection on the table.

Since the children signed their names on the record checks inside the KiTs, they could just check the sheet if they weren't sure whether they'd tried a particular KIT yet. KiTs were checked out weekly until each child had a chance to use every KIT (ten keeks). Stude it used them to practice whichever addition facts we were currently studying (his a was an in a shool quiz weekly).

#### What if kids don't return the KITs?

I had several instances in which ma or damaged. However, because the items were not ere actually using the KITs, I didn't mind having to replace expensive, and I knew that most things periodically. It's a good idea to have an extra set of KITs (or at least KIT materials) so that you can immediately replace eevel. You'll need to determine for yourself whether your students will respons s and transport them safely to and from school, but I encourage vou fith and give your students the opportunity to prove themselves. If you stress to your kids that these re very special and you spent a long time making them all yourself so they would have to learn math facts, most children will try to take very good care of them. Also, students know of eck out a new KIT until the old one is returned, and that's a pretty good incentive, too.

#### Who plays the KIT games with the students at home?

Children can play the KIT games with other children or adults. Since they keep the same KIT for an entire week (including the weekend), they have plenty of opportunities to invite friends or neighbors over, play with cousins or siblings, etc. Most games can accommodate up to 4 players. The two player games are indicated as such in their directions.

#### Do I grade students on their KIT usage?

The KITs are just an opportunity for students to practice math facts and therefore I chose not to assess them. You can give weekly timed addition fact quizzes in class if you want to measure students' growth and progress in this area.

#### What are the consequences if students don't use the KITs?

I didn't penalize students for not playing as long as they returned the KIT in good condition each week. I like to make KITs a fun privilege and hype them up so much that kids think they'd be crazy *not* to play. This can be accomplished by making a big deal out of collection time: "Ok, it's Friday! Time for new KITs! Woo-hoo! Who had a great time playing this week? Tell us who you played with! "Ten! Which game is your favorite so far? Which one would you like to get today? Boy, I can't wait to see your scores on the addition quiz. All this practicing at home—you guys are gonna rock it for sure." I how a few kids rarely if ever played, but that's really out of my control. Getting them to complete legislar homework was enough of a chore; for me, it just wasn't worth getting upset if they didn't want to play a math game.

#### How do I introduce KITs to my class?

Explain that you've created a fun way for them to practice their math fact, an home, and that they'll be able to try out the KITs in class first. If you want, tell students you'll be watching how they use the KITs in class and will make a determination based on their practice regarding whether they'll be allowed to take the KITs home. (The purpose of this statement is to get kids to view the games as a privilege and not a chore, and incentivize them to concentrate on their place.)

There are 10 games, so if you pair students us weryday, it with take 2 weeks for students to rotate through all the KITs. Give each pair a different KIT each day and have them explore the directions and materials together for 7-10 minutes. As you watch the pairs play, be sure to correct any misconceptions and check that students are caring for and cleaning any the materials properly. Afterward, take a moment to model correct/incorrect usage of KITs and/or allow a particularly responsible pair of students to demonstrate how they played and cleaned up.

Another option is to play a different Khi each day in small group rotations while the rest of the class works in math centers brecommend this or first graders and other students who may not be able to read the directions and figure out the games when working only with a partner. You can always have your on- and above grade-level students explore the games with their partners while you introduce the games in a small group setting to your below-grade-level students.

Once the class has had a chance to explore every KIT under your supervision, begin allowing them to take the games home. At that point, they should be familiar with the activities and excited to show them off at home.

#### What if I don't have time to let the kids practice with the KITs in class before sending them home?

You can skip the in-class practice period, but taking the time to properly model and guide students through practice will save you a lot of headache once students start taking the materials home. The experience will also be more valuable for them because they'll be more likely to use the games if they've had a positive experience with them and have been taught to play the games correctly.

#### What if I only want to use the KITs in class?

That works, too! Use them as centers, or as math partner games using the procedure described above. You can learn more on the Math Game Routines page of my website: https://truthforteachers.com/math-game-routines/

#### For how many weeks should I use the KITs?

I sent home one KIT per week for ten weeks. After that, the KITs were added to my math centers and students were able to play them in class if they wanted. A few parents requested that the KITs be sent home again at the end of the school year as a refresher and I accommodated their requests. Often children would ask to borrow specific KITs throughout the year and I allowed that as well.

#### How long does it take to make the KITs?

It took me about 2 hours to gather all the materials, print everything out and organize the KITs. Not bad for something my students used every single night for weeks! I was able to use the same set of KITs again the following two school years.

## I want to get started! How do I create the KITs?

Remember that you will need one set of KITs for examples in your class. If you have 11-20 students, you need to make two of each KIT. If you have more than 20 students, you need to make three of each KIT. I recommend creating an extra set of NITs in case any materials are lost or damaged.

# Materials Needed

**You will need the following for** *each set* **of KITs you make.** Each set is enough for 10 kids. Therefore, you will probably need to make 2 or 3 sets of KITs, so double or triple the materials below:

- ✓ labels for the outside of the KIT containers (from this PDF)
- ✓ printable directions and game boards (from this PDF)
- ✓ 10 shoeboxes, plastic tubs, tote bags, or other containers to hold the KIT materials
- √ 6 zip close or plastic baggies to hold the smaller materials inside each KIT
- √ 1 two-pocket folder or manila envelope to hold grid paper
- √ 10 paper (or plastic) plates; any size is fine
- √ 1 beanbag (or paper airplane)
- ✓ 3 sets of flashcards (unless you make one set for each child to keep at none)
- ✓ 1 deck of playing cards
- ✓ 1 kitchen timer, stop watch, or mini hourglass (1-3 minutes)
- ✓ 5 dice (+ 4 dice with higher numbers, if you want to make the panes harder)
- √ 13 double sided (yellow/red) counters (or pennies, buttors of other small objects)
- ✓ 2 small buttons (beads, dried beans, ones cubes, or other small items)
- √ 1 pad of paper for keeping score (if kids might not have them at home)
- ✓ 2 pencils (if kids might not have them at home)
- ✓ 1 pair of scissors (if kids might not have them at han
- √ 1 empty egg carton (or Cadbury mini crème egg Latton, or ice cube tray with lid)

When I made the KITs, I found most of the materials around my classroom and only had to buy the kitchen timers and playing cards. The total cost was less that \$15.



Here you can see the Scholastic book order boxes I used to hold each KIT.

# Printable Pages for Your KITs

#### Game boards and cards

At the bottom of each printable, you'll see directions for how many copies to print (or print one copy and photocopy additional ones.) Keep in mind these directions are for ONE set of KITs, and you need a set of KITs for every ten students in your class.

I've intentionally kept these plain to save you on color ink. Either print them on color paper or mount them on construction paper if you want to make them more colorful.

Some of the game boards and cards tell you to make 2-4 copies. If you think your students will only play with one person, then make 2 copies. If you want to give them the option to allow additional players, then make one or two extra copies to accommodate them.

- 2 different Spill It game cards (version with 11's and 12's fact practice)
- 2 different Spill It game cards (version without 11's and 12 state)
- Rotten Banana cards
- Rotten Banana game board
- Addition Memory blank flashcard grid (same as Rotten Bananas board)
- Pass Out game board

## Labels to put on the outside of your KITs

Depending on the size of your containers, you hay want larger or smaller labels. You can use the full color version with decorative labels, or save your color in cape use the plain black and white ones. If you use the black and white labels, you can print onto colored paper, or print onto white paper and then mount on colored construction paper. You can even have students color them!

I recommend writing on every label exactly which KIT set it belongs to. I had one set of KITs for students #1-10, so I wrote "SET #1-10" on the top of the labels for all the KITs for my first ten students. On the set of KITs for my second set of students, I wrote "SET #11-20". This way if I found a stray KIT someplace, I knew which set it went with:

The following labels are includes in this PDF, along with blank labels which you can print out and then hand write other KIT names if you shoose to use different games:

- Large full color labels with decorative borders
- Small full color labels with decorative borders
- Large plain black and white labels
- Small plain black and white labels

#### **Questions? Problems?**

Just email me at info@truthforteachers.com. I'm happy to help!



# **BUT WAIT! THERE'S MORE...**

I'm Angela Watson, the creator of this resource. I'm a National Board Certified Teacher with a masters degree in Curriculum and Instruction, and have 11 years of classroom teaching experience and over a decade of experience as an instructional coach. I currently work as a Productivity and Mindset Specialist in the area of educational consulting. In practical terms, this means I author books, design curriculum, and provide professional development services. Everything I do is centered on sharing more effective, efficient, and enjoyable ways of teaching and learning!

I founded my website (<u>TruthforTeachers.com</u>) in 2003 to connect with other educators. You can now find thousands of adfree articles and resources there from me and our K-12 teacher-writer's collective.

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