



LASER READER TEACHER GUIDES

Dear Assembly Coordinator and Teachers,

The following pages contain teacher guides and to be used in conjunction with Prismatic Magic's Laser Reader assembly and the Laser Reader Student Worksheet Masters located on Prismatic Magic's Web site.

The teacher guides provide additional information about the laser show. They give ideas and suggestions for ways to tie the assembly into the curriculum for specific grade level ranges but you may use ideas from any age group you would like. All ideas are suggestions and may be used as deemed appropriate by individual teachers.

Sincerely,

Your Friends at Prismatic Magic



TEACHER GUIDE
GRADES K - 2

LASER READER

To increase the educational aspect of the laser program, this guide is to be used AFTER the performance.

Language Skills

Parts of Speech

Make a list of as many adjectives the students can think of to describe the show. If they haven't learned about adjectives yet, ask them how they would describe the show or the lasers or the performance. Make a list of all the nouns they saw during the performance in person or on the screen. What happened during the show? Make a list of verbs. How did those things happen? Make a list of adverbs. Have a contest to see which student or group of students can come up with the most adjectives, nouns, verbs, or adverbs.

Acronyms

The word laser is an acronym. Each letter in the word stands for a large and possibly confusing word. (**L**ight **A**mplification by **S**timulated **E**mission of **R**adiation - we will tell the students what the letters stand for, but will not go into detail about what each word means.) Help the students understand what an acronym is. Technically, there is a difference between acronyms (pronounceable words created from the first letter or letters of words) and initials or abbreviations (the name of each letter is said or a word is just shortened). We also introduce a new acronym during the Laser READER program – AVID. **A**sk, **V**isualize, **I**nterpret, **D**ecide is a strategy to help with reading comprehension. Make a list of other acronyms the students might know. Some common acronyms are:

Scuba – **S**elf-**C**ontained **U**nderwater **B**reathing **A**pparatus, NATO – **N**orth **A**tlanctic **T**reaty **O**rganization, Radar – **R**Adio **D**etection **A**nd **R**anging, Ram – **R**andom **A**ccess **M**emory, NASA – **N**ational **A**eronautics and **S**pace **A**dministration

Expand the list to include initials. Common initials include:

ASAP – **A**s **S**oon **A**s **P**ossible, ATM – **A**utomatic **T**eller **M**achine, TV – **T**ele**V**ision

The list can be expanded further to add words that are combinations of acronyms, initials, abbreviations, or are other ways of shortening words. For example:

CD-Rom – **C**ompact **D**isc - **R**ead **O**nly **M**emory, 3D – **T**hree **D**imensional, 4WD – **F**our **W**heel **D**rive, phone – tele**ph**one

An explanation and lists of acronyms and other ways of shortening words and be found at the following Web address : <http://en.wikipedia.org/wiki/Acronym>.

Writing

Write about what happened during the performance. What was their favorite part? What did they like or dislike? What would they have changed? What songs would they have added or taken out? Depending on the students' writing level, have them write a sentence, a paragraph, or a story about the show. Or have them draw a picture and dictate a sentence or paragraph about what they drew.

Games

We played a lot of games during the program using homonyms, antonyms, mixed up letters, and adding extra letters. You can make up many games using these same ideas and more.

1. Have a contest to see which student, or which team of students, can come up with the most homonyms in 5 minutes.
2. Write a word on the board – see how many new words the students can create out of that word. Ex – From the word “laser”, you can make these words and more – real, seal, sale, are, etc.
3. Put a group of random letters on the board, with some being duplicated, and see how many words the students can make with those letters. Ex – From these letters “a, a, b, c, d, e, e, n, n, p, r”, you can make these words and more – need, deer, dear, read, bean, beep, etc.

These are just a few examples.

Reading

Listening

Read to the students. Have them visualize what is happening. Have them draw and color a picture about what they visualized. Then have them guess what will happen next. Continue reading to see if anyone was correct.

Book Club or Book Groups

Set aside time during the day to form a book club or book groups. Do it before school, after school, during recess, or set aside time during the day to do it. Call it something like “Figgy’s Avid Reading Club” or make up your own name. Let students decide if they want to take part or make it part of your reading program. Picture books work best for this age of students and make the “meetings” go quicker too. Read to them, or have them read to each other discussing the book as they go along. Let them create artwork about each book as they finish. Let them vote on the books they want to read or let each student choose a book in turn. There are so many ways to set up a book club – do whatever works for you.

Math

Basic Math Facts

Make up some simple stories about the laser show that can be used to teach basic math facts. Examples:

- Figgy the Flurf dropped 3 books one time and 4 books another time. How many books did he drop in all?
- Three children in 2nd grade sang to the songs. Two children in 1st grade did not. How many more children sang than did not?
- Three classes watched the show. Two children in each class clapped along with every song. How many children clapped with every song?

Graphing

Many bar graphs can be constructed about the performance. Choose a few songs from the performance and graph the popularity of each one. Which part of the show was the most popular - the music or the laser images? Graph it and find out. Choose a few books and find out which book is most popular by graphing it.

Science

Reading or listening is like a laser beam

A laser is light, but it is different from the light we are used to getting from light bulbs, etc. Regular light is divergent, which means it goes off in every direction. Laser light is collimated, which means the light is all focused in one direction. Explain this very simply to the students. Then compare that to reading or listening. Have students move around the room, talk with each other, play a game, etc. while you read a story to them. When you are finished, ask questions to see if they understood what you read. That is being like a light going off in many directions – it is not very bright or powerful. Now have them sit still and pay attention while you read and see how much more they heard and remember. That is being like a laser being focused on one thing – much more effective and powerful.

Art

Art Skills

Have the students draw a picture of their favorite part of the performance. They can also decide what they would like to include in a laser show and draw that. Or have them think of their favorite song and draw a laser scene from it. Listen to music and have students picture how they could create the music visually. Then have them create it. The movies *Fantasia* and *Fantasia 2000* are excellent examples of this.

Your ideas

Go ahead and draw on your knowledge and skills to come up with any other activities. Relate the lasers to something you are teaching in any subject. Who better to come up with activities than you – the teacher!!



TEACHER GUIDE
GRADES 3 - 5

LASER READER

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Language Skills

Parts of Speech

Make a list of as many adjectives the students can think of to describe the show. Make a list of all the nouns they saw during the performance in person or on the screen. What happened during the show? Make a list of verbs. How did those things happen? Make a list of adverbs.

Acronyms

The word laser is an acronym. Each letter in the word stands for a large and possibly confusing word. (**L**ight **A**mplification by **S**timulated **E**mission of **R**adiation - we will tell the students what the letters stand for, but will not go into detail about what each word means.) Help the students understand what an acronym is. Technically, there is a difference between acronyms (pronounceable words created from the first letter or letters of words) and initials or abbreviations (the name of each letter is said or a word is just shortened). We also introduce a new acronym during the Laser READER program – AVID. **A**sk, **V**isualize, **I**nterpret, **D**ecide is a strategy to help with reading comprehension. Make a list of other acronyms the students might know. Some common acronyms are:

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Writing

Write about what happened during the performance. What was their favorite part? What did they like or dislike? What would they have changed? What songs would they have added or taken out? Have the students write an informative article about the performance, an advertisement or brochure for the performance, a critique of the show, a persuasive argument for or against this assembly, etc. Have the students come up with a theme for their own laser show. What would it be? What songs would go with their theme?

Word Puzzles

Give the students graph paper and let them create word searches, crossword puzzles, codes, etc., using words or phrases from the laser show. Then let them trade puzzles with other students to see if they can solve them. As a class, create a giant puzzle on a piece of butcher paper and share it with another class.

How Many Words?

Write a word about reading on the board. How many words can the students come up with using only those letters?

Example word: *comprehension*

Words from *comprehension*: *hen, noise, phone, mop, mope, hope, etc. . . .*

Reading

Are You Paying Attention?

Students love being read to, but how do you know they are paying attention? One way is to read a chapter of a book aloud to the class and have them either write a paragraph describing what happened or draw a picture showing what happened in that chapter. When finished reading the book, each student will have a mini-book or condensed version of that book that will help them remember each book you read during the year.

Quiz Time

Have the class or groups of students read the same book. Have them write down questions about the book as they read. Then have them quiz each other to see if they comprehended what they read.

Book Club or Book Groups

Set aside time during the day to form a book club or book groups. Do it before school, after school, during recess, or set aside time during the day to do it. Call it something like "Figgy's Avid Reading Club" or make up your own name. Let students decide if they want to take part or make it part of your reading program. Have them read aloud to each other or read silently individually. Let them create artwork about each book as they finish. Let them vote on the books they want to read or let each student choose a book in turn. There are so many ways to set up a book club – do whatever works for you.

Math

Graphing

Many bar graphs can be constructed about the performance. Vote on the songs from the performance and graph the popularity of each one. Which part of the show was the most popular - the music or the laser images? Graph it and find out. Which is more popular – fiction or non-fiction? What is the most popular book in the class right now? Let the students create other graphs besides bar graphs.

Art and Music

Art Skills

Have the students draw a picture of their favorite part of the performance. They can also decide what they would like to include in a laser show and draw that. Or have them think of their favorite song and draw a laser scene from it. Listen to music and have students picture how they could create the music visually. Then have them create it. The movies *Fantasia* and *Fantasia 2000* are excellent examples of this.

Word Art

A creative way to write a word and turn it into art is to write the word using pictures of the word. For example, if my word was flower, I would draw a flower drooping over at the top with a leaf sticking out on each side to look like a letter “f”, and so on. Another way to do this is to make an outline of a flower and stretch, squeeze, and squish the letters of the word flower to fit inside.

Listen To The Music

Students know all about comprehension when they are reading, but what about when they are listening to music? Play a popular song and have everyone listen to it. Have students write down what the song is about, the words to the chorus, etc. Do they really listen to the words or pay attention when they listen to music? Find out.

Simile and Metaphor Art

Have students pick out similes and metaphors from books they are reading. Let them create art that depicts those similes and metaphors. For example, if they read, “The sun was as hot as an oven,” they might draw a picture with an oven in the sky with the door open and the temperature set to high, with people walking around looking like cupcakes being baked, etc.

Your ideas

Go ahead and draw on your knowledge and skills to come up with any other activities. Relate the lasers to something you are teaching in any subject. Who better to come up with activities than you – the teacher!!

