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From Page to Film

Ron Weasley, Stuart Little, Shrek: What do they have in common? All are characters in books—and all have made the big leap from the printed page to the big screen!

Hollywood has discovered that popular children's books can make hit movies. *Harry Potter and the Sorcerer's Stone* earned more money than any other film in 2001. Filmmakers have also worked their magic with other books, including Dr. Seuss's *The Cat in the Hat*.

It's not easy turning a book into a movie. Screenwriters have a challenging job. They turn written words and imagined scenes into spoken words and action. Sometimes, they must make a 400-page tale fit into two hours. At other times, the screenwriter expands a short story like *Shrek*. That's one reason the film is never exactly the same as the book. "It has to be different," says author Natalie Babbitt, "or it's not going to work." She wrote *Tuck Everlasting*. The movie has a love story that's not even in the book!

Some people are disappointed when the story is changed. Not Chris Van Allsburg, the author of *Jumanji* and *The Polar Express*, which were also made into movies. "A book is often just the starting point," he says. That's good advice for both filmmakers and readers: Start with the book, and *then* go see the movie!

From Page to Film *(cont.)*

Directions: Answer these questions. You may look at the article.

1. Who are Ron Weasley, Stuart Little, and Shrek?

2. Is it easy to turn a book into a movie?

3. Why are films never exactly the same as the book?

4. What do you prefer, reading a book first and then seeing the movie or seeing a movie and then reading the book?

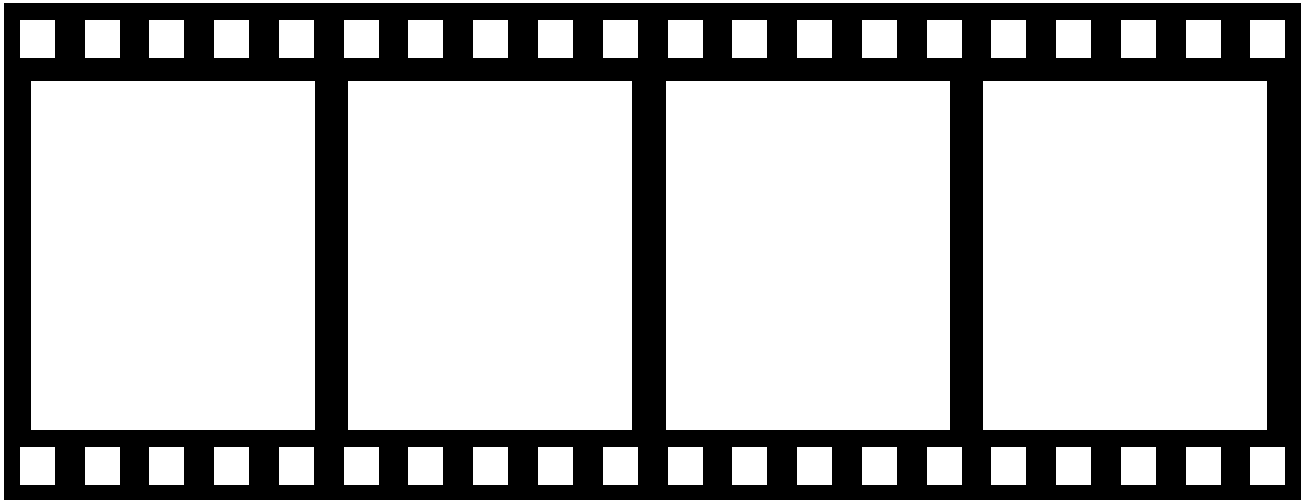
5. How do you think authors feel about their books being made into movies?

6. What would happen if books were never made into movies?

7. What book do you think could be a hit movie? Why?

From Page to Film *(cont.)*

Directions: Think about a story you have read. Draw some pictures to show how the story might be shown in a film. Answer the questions.



1. What story did you illustrate above?

2. Was it easy or difficult to illustrate the story? Why?

3. How long do you think it would take for you to illustrate a whole story?

Searching the Heavens

When did the universe begin? Does it stretch on forever? Is there life on distant planets?

Humans have been asking questions like these since they first gazed up at the sky. The answers might be found on mountaintops, where scientists have been building powerful new telescopes. Around the world, from Hawaii to South America to Europe, these superscopes are helping us see farther into space than ever before.

A telescope's power depends largely on the size of the mirror inside it. The bigger the mirror, the more starlight it can catch. A huge, perfect mirror can capture even the faintest star glow.

The new telescopes reflect improvements in how telescope mirrors are built. Older telescopes had thick, heavy mirrors, but there were limits to how big they could be. Some new scopes have thin, flexible mirrors controlled by computers. Others, like the Keck telescope in Hawaii, have jumbo mirrors made up of many small ones. Its mirror is 33 feet across. The Keck is one of four huge new telescopes in Hawaii.

Giant telescopes are helping scientists make amazing discoveries. Astronomer Geoff Marcy has discovered 35 planets circling sunlike stars. "The vast majority of them have been found with Keck," he says. A new telescope in Chile has helped European scientists estimate the age of the universe: 14 billion years.

Astronomers like George Djorgovski in Boston hope to explore the heavens with even bigger telescopes. "We'll almost certainly find things we never could have imagined," he says.

Searching the Heavens *(cont.)*

Directions: Answer these questions. You may look at the article.

1. What determines a telescope's power?

2. How are newer telescopes better than older ones?

3. Why do you think scientists chose to place these powerful telescopes on mountaintops?

4. What is unique about the Keck telescope, and where is it located?

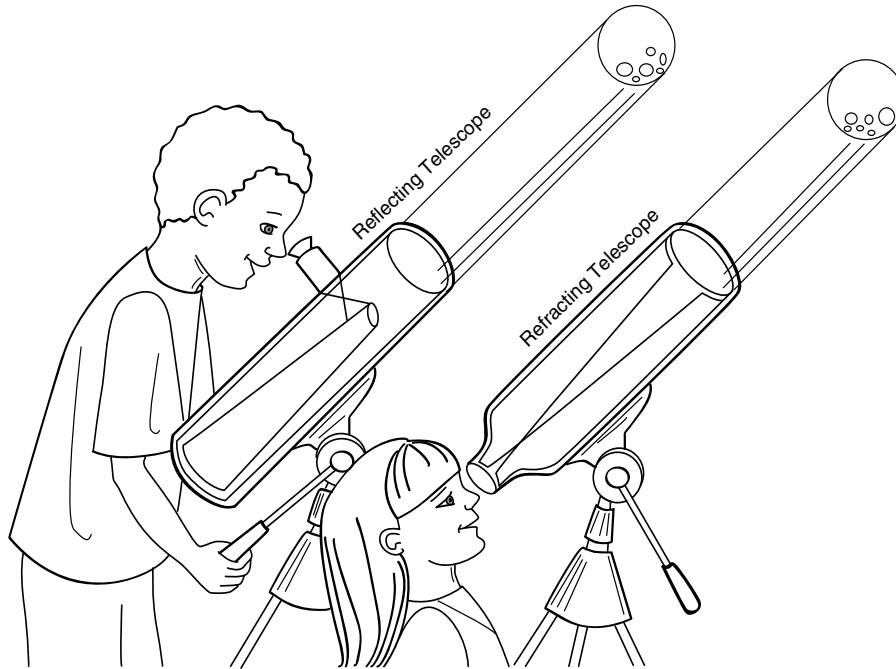
5. What amazing discovery was made with a new telescope in Chile?

6. What did Geoff Marcy discover?

7. Why do you think it's important to find out more about our universe?

Searching the Heavens *(cont.)*

Directions: Look at the diagram. Answer the questions.



1. How many types of telescopes are shown in the picture?

2. Which type of telescope is described in the article? How can you tell?

3. If you were going to buy a telescope, which kind would you get? Why?

4. How does the diagram help you to understand how a telescope works?
