

Programming

Here are a few ideas for programming for the summer. In some cases we have offered a complete 30 minute or one-hour program, but we have also listed a great number of crafts or games that we hope will allow you to put together your own programs based upon collection, staff and resources. The ideas have come from many places including Summer Reading Programs in the United States, as well as libraries in Canada. If you are doing something which will be of interest to others, please feel free to share it with everyone at: www.td-club-td.ca

NOTE: Many of these programs suggest specific titles. Feel free to substitute books you have on the same subject.

Storytimes

PJ Storytime

Some suggested books you may choose to use:

Good Night, Mr. Night! by Dan Yaccarino
I'll Catch the Moon by Nina Crews
Goodnight Moon by Margaret Wise Brown

Activities and Craft:

At the conclusion of the program, invite your group to put the stars in the sky!

- Cut out approximately 10 yellow, white or silver stars per child.
- Toddlers can use a non-toxic glue stick to attach their stars to black or dark-blue construction paper.
- Stars need to be big, about two inches in diameter, so the children can handle them.
- For very young toddlers, it will be easier for the parent to put some glue on the construction paper and then the child can attach the star.

Note: Small star stickers will not work with this age as they are a choking hazard and are too tiny to be manipulated by little fingers.

For a shorter activity, cut out one large felt moon and a number of felt stars and invite the children up to put the stars on a felt board. Put the moon up yourself to demonstrate.

Fingerplays/Songs/Rhymes:

“Ring Around the Rocket Ship”
“Twinkle Twinkle Little Star”

Encourage the parents to help their child see the real stars in the sky. (It might be fun to invite the group to attend the program dressed in their pyjamas).

Jump Over the Moon

Some suggested books you may choose to use:

Bringing Down the Moon by Jonathan Emmett

In a Space of the Sky by Richard Lewis

Little Pig Figwort Can't Get to Sleep by Henrietta Branford

The Cow Who Wouldn't Come Down by Paul Johnson

The Rooftop Rocket Party by Roland Chambers

What is the Moon Full Of? by Shulamith Levey Oppenheim

Activities and Craft: Spiral Universe Mobile

Create a personal universe by hanging small-decorated balls from a spiral, p. 92

Supplies:

- Card stock on which to photocopy a spiral
- Small Styrofoam balls (pompoms, card stock circles or other spheres)
- Markers
- Thread
- Space heater/fan

Instructions:

Pre-cut the spiral and thread the balls. Have children decorate a spiral and the planets. If the spiral is held over the fan, the rising hot air will make the spiral spin.

Fingerplays/Songs/Rhymes:

"Hey Diddle Diddle"

"Twinkle, Twinkle Little Star"

"I'm a Little Rocket"



Happy Birthday, Moon

Some suggested books you may choose to use:

Happy Birthday, Moon by Frank Asch

Papa, Please Get the Moon for Me by Eric Carle

Simon in the Moonlight by Gilles Tibo

Activities and Crafts: Man in the Moon Hats

- Man in the moon shape
- Hat shapes
- Glue
- Crayons
- Sparkle/glitter if desired

Instructions:

Have children decorate a hat for the moon, then glue it onto the moon.
Templates on p. 93.

Song:

“Flying to the Moon”



See the Universe

Some suggested books you may choose to use:

Astro Bunnies by Christine Loomis

I Want to Be an Astronaut by Byron Barton

It Came From Out of Space by Tony Bradman

Minnie and Moo Save the Earth by Denis Cazet

Space Case by James Marshall

Space Spinners by Suse MacDonald

Activities and Craft: A Galaxy in a Jar

Supplies:

- Baby food jars
- Water
- Sequins, aluminum foil, sparkles (you don't have to have all of these in one jar)
- Blue food colouring (optional)
- Black paint (optional)
- Stickers to decorate with (optional)
- Scissors
- Glue
- Oil (optional)

Instructions:

Paint the lid of the baby food jar or decorate with stickers (optional).

Put in some sparkles, some sequins (star shape, moon shape and circle shapes – all work well) and some small balled up pieces of aluminum foil.

Fill the jar with water.

Put a few drops of food colouring in the jar (optional).

Put a few drops of oil in for a bit of a lava lamp effect (optional).
Put the lid on tightly.
Shake it up to see the galaxy!



Space Exploration

Some suggested books you may choose to use:

Cosmic Chickens by Ned Delaney

Grandpa Takes Me to the Moon by Timothy R. Gaffney

I Want to Be an Astronaut by Byron Barton

There Was a Bold Lady Who Wanted a Star by Charise Mericle Harper

Activities and Craft: Space Exploration

Pretend to be on a Spaceship– experience zero gravity by doing things in S-L-O-W motion. Have a count-down (good experience in counting backwards)
Where are you heading? What do you see when you get there? Return to Earth. Show some photographs of the Earth from space (**Seeing Earth from Space** by Lauber has some).

Spaceship with Pop-up Alien or Astronaut

Toilet paper roll spaceships with pop-up aliens or astronauts

Instructions:

Cover the toilet paper roll with aluminum foil or silver paper. Add “accessories” (doors, windows, anything that might be found on the outside of a spaceship) to the space craft with construction paper. Draw/design an alien/astronaut to be glued to a small craft (Popsicle) stick. The alien/astronaut must be narrower than the toilet paper roll opening. Insert the alien/astronaut stick into the spacecraft and have him “pop-up.”



Starry Skies

Some suggested books you may choose to use:

Alistair and the Alien Invasion by Marilyn Sadler

Dmitri the Astronaut by Jon Agee

It Came From Outer Space by Tony Bradman

Martian Rock by Carol Diggory Shields

Zoom! Zoom! Zoom! I'm Off to the Moon! by Dan Yaccarino

Activities and Craft: Alien Spaceship

Supplies:

- 6-inch Styrofoam bowls
- Green and orange construction paper
- Multi-coloured star stickers

Instructions:

Preparation: glue 2 bowls together and cut a one-inch slit in the top of one. Cut out alien heads and rocket flames. Have children draw a face on the alien and push it into the slit. Tape flames onto the bottom of the ship. Children can decorate spaceships with stick-on stars. You may also want to put rice inside the bowls before gluing for extraterrestrial sound effects.

Fingerplays/Songs/Rhymes:

Fingerplay:

Ginny looked at the moon (circle arms overhead)

Ginny looked at the stars (wiggle fingers)

Ginny got into a spaceship (palms together, waist high)

Ginny flew to Mars! (palms together, quick over head)

Let's catch a star and put it in our pocket! Let's form a circle and stretch both arms straight up in the air and look up. Reach and reach and reach and catch a star! I caught one! Stick out your hip and put it in your pocket. Close the pocket and lock it! Try catching a comet by its tail and have trouble stuffing the whole thing into your pocket.

For Older Children



Space Rock by Jon Buller

Collect rocks, preferably around the same size. After reading the book, put out rocks, paint and brushes on tables for the children to create their own friend from space. Glow-in-the-dark or metallic paint will add a nice touch.



A Trip to the Moon

Read **I Want to Be an Astronaut** by Byron Barton, or any other story about the moon. Then go on a (pretend) space shuttle to the moon to collect moon rocks which you have hidden around the room. The children can then paint the rocks.



Dmitri the Astronaut by Jon Agee

Create a Lulu of your own using pipe cleaners, after reading the story of the gentle lunar alien who rescues Dmitri from obscurity.



Flying Saucers

Can be made from discarded CDs and egg carton sections. (These will fly like a Frisbee, so be careful.) Small paper bowls on a paper plate are another alternative. Provide smiley-face stickers for the little ones to use as aliens and large blank stickers for the older ones to draw their own aliens. These can be decorated with crayons, stickers or foam shapes.



Alien Faces

Using a paper plate as a base, use unusual colours as well as white for variety. Have crayons, stickers and other collage bits for decorating.



Bookmarks

A 2005 themed one could be an astronaut and space shuttle connected by a length of yarn.



Build a Space Station

Cover a large table with cardboard and green paper and provide an assortment of small boxes of all shapes, packing materials, paper, glue, scissors, markers, string, pipe cleaners, straws, toothpicks, paperclips, plastic disposable containers, aluminum pans, foil and paper roll tubes on a cart by the table. Copy pictures from books or print pictures off the Internet of space stations, space vehicles, astronauts and aliens to assemble into a booklet for patrons to use for ideas and let the patrons use their imagination to build a fanciful space station or spaceship.



Design Aliens

Many different space creatures can be made, using leftover paper circles and scrap construction paper. Different colours of modeling clay can also be used.



The Magic School Bus Inside the Solar System

This story can be written as a cute little skit which is performed as a reader's theatre (older children reading the parts) as a program for the younger ones.



Sit-in Rocket Ship

Make a rocket ship from a huge sheet of plastic taped together to make a tube and kept in the shape of a tube by a 20" electric fan blowing at one end of it. It forms a great tunnel that the children think is cool to sit in. You can decorate the outside with stars or planets that the spaceship riders would be seeing if they looked out the windows.



Alien Mascot

Create a mascot for the summer. This could be either two-dimensional from the clip art or three-dimensional. The mascot can be physically hidden in the library or metaphorically in a book or around the library/town. As books are read, clues can be given out. Or, create a choice of four or five places the mascot could be. Have the children try to guess the location throughout the summer. Large plastic blow-up aliens can be purchased as well.



Going to Visit Another Planet – Version One

If you were going to visit some aliens on their world, what would you take with you to show them what Earth is like?

The Voyager spacecrafts have taken golden records with sounds, music and images that represent the variety of life and culture on Earth.

A complete copy of what is on the record can be found at:

<http://re-lab.net/welcome/>



Going to Visit Another Planet – Version Two

Gather some travel brochures from travel agencies or online as samples. After studying information about the planets, have children pick a favourite planet to write about. They can cover such topics as the spaceship cruise the vacationers will take, scenic topography of the planet, recreational activities available and food and lodging possibilities. Are there other people there? What are they like? How do they dress? Are there many cultures or just a few?

One man has done this already for the International Space Station

<http://www.hardyart.demon.co.uk/html/iss-ex.html>



You Ought to Be in Pictures

Get a hold of a large box such as a refrigerator box. Draw a spaceship on it and cut out a window where the child's head will fit. Have the children sit behind the spaceship with their head poking out and take pictures. Or, draw a picture of an alien on a large box but leave the face as a hole for the child's face.



Space Suitcase

The astronauts are going on a trip and with them they took "Another astronaut" "A book" "A capsule" etc. (ABC) An outerspace version of the old memorization game.



Make Your Own Planet

Make available atlases of the world and books on making maps (912 in most libraries). Copy maps of make-believe places like Earthsea, Pern, Redwall or Middle Earth.

Ask the children what their planet would be like:

- ❖ Does it have islands, continents, or a combination of both?
- ❖ Do they have mountains, deserts, swamps, etc.
- ❖ What's the climate like? Is it hot, cold, dry, humid, etc.
- ❖ Is the planet close to the sun or far away? How does this affect your planet?
- ❖ Is there more than one sun or moon? What does that look like from your planet? (two suns might mean, for instance that there is no night)
- ❖ What colour is the sky? What colour is the water? Is there water?



Send a Postcard Home

In **The Magic School Bus Lost in the Solar System** by Joanna Cole, the class travels through space and has a wild adventure. Ask the children to imagine a trip into outer space and to create a postcard to show and tell what they saw. This is a great opportunity to display a number of non-fiction books about space in your library.



Star Search

Before the children arrive at the library, write each child's name on a star-shaped paper cut-out and hide the stars around a designated area of the library. When they arrive, divide the children into teams. Each child must find the star with his or her name on it, and the team that finds all of its stars first is the winner.



Starry Starry Night

Books to Share:

The Blizzard's Robe by Robert Sabuda
City Night by Eve Rice
The Night Rainbow by Barbara Juster Esbensen
Starry Messenger: Galileo Galilei by Peter Sís
Tar Beach by Faith Ringgold

Books to Show or Booktalk:

Arctic Lights, Arctic Nights by Debbie S. Miller
Aurora: A Tale of the Northern Lights by Mindy Dwyer
The First Starry Night by Joan Shaddox Isom
See the Stars: Your First Guide to the Night Sky by Ken Crowell
Vincent Van Gogh: Portrait of an Artist by Jan Greenberg

Decoration:

Purchase glow-in-the-dark paper and cut out star shapes. Decorate the meeting or program room with the stars and other glow-in-the-dark objects. After being exposed to light, the paper will glow for about 30 minutes when the lights are dimmed or turned off.

Tongue Twister:**Night Light**

There's no need to light a night light
On a light night like tonight,
For a night light's light's a slight light,
And tonight's a night that's light.
When a night's light, like tonight's light,
It is really not quite right
To light night lights with their slight lights
On a light night like tonight.
(Author unknown)

Stories

"The Sack of Diamonds" in **Stupid Peter and Other Tales** by Helen Kronberg Olson. The story explains how sparkling stars got in the sky. The story is also in **Read for the Fun of It** by Caroline Feller Bauer.

"Coyote Helps Decorate the Night" in **From Sea to Shining Sea** compiled by Amy L. Cohn. The Hopi myth tells how Coyote tossed the stars into the night sky.

How the Stars Fell Into the Sky: A Navajo Legend retold by Jerrie Oughton tells how the patterns of the stars got there.

As an added feature for your storytelling, create constellations on paper cups ahead of time by drawing dots for the stars on the bottom of heavy paper cups, like those used for hot drinks. Punch holes with a sharp pencil or ice pick where the dots are. Turn down the lights and place a flashlight in the cup so the light shines through the holes and creates the constellation on the ceiling of the program room. Test your constellation in advance to be sure that you did not make the holes too big or leave them too small. If the children are old enough, allow them to do the craft.

Song:**"Would You Like to Swing on a Star?"**

This standard from the 1940's is available in many music collections. If you do not want to try singing, play the "Purly Gates" version available on *Singin' on a Star*.

Craft: Fireworks!**Supplies:**

- Black or dark-blue construction paper
- Glitter in a variety of colours

- White or clear glue
- Small paper cups to hold the glue
- Craft sticks, toothpicks, and coffee stir sticks
- Disposable aluminum baking sheets (optional)
- Newspaper or other material to cover tables

Instructions:

Create colourful art that looks like fireworks. In advance, cover the tables to protect them from glue. Provide each child with a small paper cup of glue and a sheet of construction paper. Each child dips the craft sticks, toothpicks or coffee stirrers into the glue and spreads thin lines of glue onto the construction paper to create patterns. The width of the line will vary depending on the type of stick used to spread the glue. Encourage the children to try starbursts, geometric shapes, flourishes and spattered lines. After each pattern is made and before the glue dries, sprinkle glitter on the glue. Shake off excess glitter into a shallow baking sheet or trashcan. Repeat the process of gluing and adding glitter until the sky is filled with fireworks. Use different colours of glitter for each firework.



IN 2 SPACE Stories, Films and Crafts for Intergalactic Explorers

Some suggested books you may choose to use:

The Amazing Pop Up Pull Out Space Shuttle by David Hawcock
La Fusée Décolle (Nick Sharratt, also in English **Rocket Countdown**)
Mooncake by Frank Asch
What Faust Saw by Matt Autley
Earthlets as Explained by Professor Xargle by Jeanne Willis

Tell and Draw Story :

“Trapezoid and Parallelogram” from **Draw and Tell** by Richard Thompson

Riddles and Jokes: (pp.60 ff.)
Unidentified Flying Riddles by Joanne Bernstein
Spacey Riddles by Katy Hall

Video:

Alistair in Outer Space (Reading Rainbow)

Craft:

Single or double-sided flyer from **Space Crafting; Invent Your Own Flying Spaceship** by Mary Blocksma

Supplies:

Paper plates, markers, stapler, pencils, scissors
Handouts from NASA website



Explore Your Library, it's a Galaxy of Information. Blast off to These Stories

Stories:

My Brother is from Outer Space by Vivian Ostrow

Zenon: Girl of the 21st Century by Marlyn Sadler

Action Story:

"The Spaceman in the Rocket Ship" from **Listen and Help Tell the Story** by Bernice Carlson

Drawing Story:

"Andrew the Astronaut" from **Riddles & Rhymes and Rigamaroles** by John Cunliffe

Songs and Rhymes:

See attached list on p.61

Poetry:

"Rockets", "Space" from **Don't Eat Spiders** by Robert Heidbreder

Craft:

Alien Headbands: see logbook for instructions



Northern Lights

Suggested Books:

Northern Lights by Dorothy M. Souza

Show some photographs, either online or from books and magazines of the Aurora Borealis. Note that the colours look as though they take shapes—curtains are vertical wisps of colour, spirals look windblown. This site has some lovely images, as well as legends and folklore about the northern (and southern!) lights:

<http://vathena.arc.nasa.gov/curric/space/aurora/>

There is a nice story here:

<http://www.geocities.com/Petsburgh/Yard/5541/aurora.html>

Lots of links to information and pictures
<http://www.arctic.noaa.gov/lights.html>

Allow children to paint their own Northern Lights

Supplies:

- White watercolour paper
- Watercolours and brushes
- Water
- White crayons

Instructions:

Let the children use the white crayon to draw a few stars. Then they should brush watercolours in streaks across the horizon. The paint won't stick where the crayon has been used. Instruct the children to gently tilt the paper around while the paint is wet so the colours drip into each other a little bit. This will create a dramatic picture of the sky. Let the paper dry thoroughly.



Star Finger Puppet

Make the “Twinkle Star Finger Puppet” on page 18 in **Crafts from Your Favorite Children’s Songs** by Kathy Ross. If you do not have room to do this craft in the library, provide the instructions and materials for a *make and take* craft that can be done at home.



Glow Art

Purchase glow-in-the-dark paper. Allow the children to use it to create a star mobile, star masks, or other glowing items.



Activity

Hold a *star party* after the library has closed. Borrow several telescopes from the science department at the local college or high school or from an astronomy club. Hand out star charts, available in many books or online at www.fourmilab.ch/yoursky/. This site allows you to print out guides for any location, date and time of viewing. See how many constellations, planets and stars the children can find in the sky. Be sure you have plenty of adult supervision.



Guest Speaker

Invite a member of a local astronomy club to talk about constellations, nebula, black holes, and such. If you can't find a local club, check with community colleges and universities or <http://www.astrosociety.org/resources/linkclubs6.html#canada>



Astronaut's Spacesuit Rocket Pack

Jet packs or air tanks:

Use clear packing tape to wrap two empty pop bottles together, then cut thick strips of fabric or ribbon and tape on. The straps will look like those on a backpack. If your budget extends to metallic paint, this makes the packs look much more authentic.



Alien Pictures

Fold an 8 1/2 x 11 inch sheet of paper in thirds the short way so that only a third shows at a time. All children start out with one sheet of paper. First have everyone draw the head of a monster or alien. When they are finished, the top third is folded behind their paper and passed to the person on their right. Next everybody draws a body in the middle third of the paper. It is folded again and passed on again. On the final third everybody draws legs and feet. The papers are unfolded to reveal their group creations. It helps if the lines extend slightly onto the next third so that the next child knows where to start.



Rocket Ships

Materials:

Paper towel rolls, aluminum foil, circle halves taped or stapled into cone shape, glue, brushes, crepe paper strips (red), tape. (A coffee can lid makes a good size for the nose cone circle).

Instructions:

Keep circle halves cut and ready to use. Give each child a paper towel roll and a sheet of aluminum foil to wrap around the roll. Staple together the half circle to make a cone shape. Child should glue the cone onto the roll. Now tape on crepe paper 'flames' to the bottom of the roll.



Painting Earth

Show the children pictures of Earth from outer space –NASA has lots of sites such as <http://grin.hq.nasa.gov/UTILS/search.cgi> and <http://nix.nasa.gov/> (Type in Earth as the search term)

Give the children a big white piece of paper cut in a circle and green and blue paint so that they can paint the Earth.



Living on the Moon

Since there is no sound on the moon (no atmosphere) there is no talking. Show the children how to “moon scream” – they can open their mouth and pretend to yell but with no sound coming out! To simulate walking on the moon, have the children walk on a large foam mattress. Use shoe box “moonboots” as an added touch. How much do they weigh on the moon? Take their weight in pounds and divide it by 6.



The Planets

How many sentences can the children make up to remember the names of the planets?

Here are two to get them started

My Very Excited Mother Just Served Us Nine Pizzas

My Very Easy Method – Just Set Up Nine Planets



Tangram



Make a rocket ship
from tangram shapes:

This site has patterns for
double tangrams:

<http://educ.queensu.ca/~fmc/september2001/DoubleTan.htm>



Build a Rocket Ship Contest

This can be done within the library if you have enough supplies or as a contest where children build rockets at home and bring them in. To make it more interesting, one of the rules can be that the rocket ship must be made from recycled materials. Divide the contest into several age groups. This is a great project for fathers and sons to do.



Make Your Own Robot Contest

Robots come in all shapes and sizes and perform all sorts of tasks. Tell the children to collect items that might be used for a robot such as film canisters, metal spirals from a used notebook, beads, bottle caps, cartons, broken toys, broken cassettes or CDs, paper towel tubes, shoulder pads from clothes, tape spools, etc. Have them build a robot at home and bring it in for judging. What was it built to do?



Intergalactic Quiz

Q. I am the King of the Sky, with Regulus closest to my heart. What am I?

A. The constellation, Leo the Lion

Q. I am your closest neighbour but nobody lives here. What am I?

A. The Moon

Q. I am not a chocolate bar. What am I?

A. The Milky Way

Q. I have a head and a tail but I can not see or walk. What am I?

A. A Comet

Q. I am the product of 16 countries. What am I?

A. The International Space Station

Q. In 1865, this book featured men being sent to the moon by cannon. What is it?

A. Jules Verne's novel **From Earth to Mars**

Q. "To every action there is an equal and opposite reaction." What am I?

A. Newton's Third Law of Motion, 1687*

Q. You use me everyday but cannot see, touch or taste me. What am I?

A. A Satellite

Q. More than 63 million books are in print and have been translated into more than 15 languages, based upon this TV series. What is it?

A. Star Trek

* You can explain Newton's law by asking the children to think about astronauts in weightless space. If they push against something – they move.



Space Science Fun

Many astronauts have a science background. Do some space science to start the children thinking about becoming astronauts!

Create craters in the moon. Instructions can be found here:

<http://www.kidwizard.com/Spells/CraterCaper.asp>

The Deep Space 1 spacecraft uses an **ion engine** to propel itself through space! Make ions of your own (Ions are atoms with a positive or negative charge).

Make pieces of paper fly through the air and stick onto a balloon.

Supplies:

- Balloons
- Sheets of paper in various colours
- A hole punch

Instructions:

Use the hole punch to create small circles from the paper.

Inflate the balloons to a size that fits easily in your hand.

Tie a knot in the end of the balloons.

Rub the balloon back and forth gently on hair about 10 times. Don't press too hard.

Hold the balloon close to, but not touching, the paper circles. The balloon will pick up the confetti because the balloon now has a negative charge, and the confetti has a slight positive charge.

<http://www.galaxy.net/~k12/space/artgrav.shtml> has a nice experiment using paper plates to create artificial gravity.



Recipes

There are two recipes in the logbook. Here are more:

Rocket Fuel:

Green lime cordial

Soda water

Ice cubes

Green jelly beans

Mix and serve with twisty straws

UFOs:

Orange or grapefruit halves

Toothpicks

Olives, cheese cubes, dates, pineapple pieces, etc.

Stick one end of the toothpick into the orange/grapefruit half, and stick another small piece of food on the other end.

Alien Cookies:

Decorate large round sugar cookies with alien faces.

Astronaut Pudding

2 tablespoons dry pudding mix (any flavour but banana cream or pistachio will turn colour when milk is added)

1/3 cup milk

Put the two ingredients in a Ziploc bag (Or double bag just in case!)

Children shake, squish their pudding until mixed then snip a corner and squeeze the pudding into their mouths! Or have the children try to eat the pudding through a straw which is much more difficult!

Tang was also used by early astronauts. This site tells which foods shuttle astronauts have to choose from now, and how they are prepared:

http://www.space.com/teachspace/module_astronaut_0900/dining_foodlist_0900.html



Inventions

Although Tang was first available in 1959, its popularity took off when the American astronauts began to drink it. Many other everyday items were either invented for space or greatly improved because of space travel. Just a few of them include: freeze-dried ice cream, thermal gloves, tap water purifiers, exercise machines, heat resistant paint, invisible braces, barcoding, ear thermometer, improved TV satellite dishes, improved firefighter's protective gear, improved solar heating, smoke detectors and cordless tools. Check out these and others in **Inventions from Outer Space** by David Baker. Ask the children to come up with inventions they would like to see or expect will happen as other planets are settled.



Constellations

Most libraries have at least one book on constellations and the booklist has many stories based upon them. Some information about constellation stories can be found here: "The Stories of the Constellations"

<http://www.ufrsd.net/staffwww/stefanl/myths/stories.htm>

A teacher had her class create their own constellation stories and then make masks reflecting the story. Some of this could be done in a one- or two- week program:
<http://goa.cet.middlebury.edu/teportfolios/gstuppy/ast-const.html#>

“Windows to the Universe” has a great site for both stories and pictures of constellations
http://www.windows.ucar.edu/tour/link=/the_universe/Constellations/constnavi.html

Read **The Magic Tree House Hour of the Olympics**

And use the “Connect the Dots” activity from

<http://www.randomhouse.com/teachers/magict/h/pdf/NightSkyConnectDot.pdf>



The Moon

There are many stories about the moon, from **Happy Birthday Moon** (Asch) and **Simon in the Moonlight** (Tibo) to **Many Moons** (Thurber) and they are all great read alouds. Extend this program by having children create a moon with craters by gluing various objects (such as beans) to a stiff piece of paper cut into the shape of the moon. Cover it all in foil and you have the moon!



Going on a Space Trip

Tell the children that although they will have quite a few books loaded onto their computer, they will be allowed to take three actual, physical books with them as they go on a long space trip. Which three will they choose? Allow time for them to find the books in the library and booktalk them. Perhaps have a contest. There are only three books allowed in total and each child gets a chance to promote one book. Everyone then votes.



Space Invasion Party!

Give out invitations (on p. 94) to the party at the previous week’s program.

- (1) When children come into the room, have them sign the “Space Invasion Guest Book.” They can sign their real name as well as their astronaut or alien character’s name. A cheap notebook from the dollar store will suffice for this.
- (2) Begin the program with the group assembled as a whole. Conduct an audience participation story (scoutingbear.com—*How the Moon, Stars and Sun Got into the Sky*). Give each child a cut-out with their part (the word or phrase they’re responsible for (pp.95-98). Explain how an interactive story works and have the children practice their parts before reading the story.

- (3) Star Finder Craft: Print template from <http://spaceplace.jpl.nasa.gov/en/kids/st6starfinder/st6starfinder.shtml>. Have children colour and decorate the template then cut it out. Show children how to fold it. You may want to print and enlarge the directions for folding and post it nearby.
- (4) Flying Saucer: This is a craft that can be done with both younger and older children. You will need a stapler, crayons or markers and pre-cut string (about 15 inches). For each child you will also need two paper plates. Have a hole pre-punched through the centre of what will become the top half of the saucer. To begin, children will first decorate the bottom of both paper plates. When they are done decorating, have them string the yarn through the hole, make a knot and tape it in place. Then staple the two plates together with the decorated sides showing. Voilà—a flying saucer!
- (5) Design-an-Alien Wall: Use the craft: Alien Picture on p.29. When the children are done, post the results on the Alien Wall.
- (6) Children will enjoy picking out which parts of the alien they have drawn.
- (7) Space Invasion Quiz: See p. 99. Tip: Have all of the materials the children need to find the answers to the questions in your program room so that they are not running all over the library!
- (8) Contest: Guess how many moon rocks are in the jar?

Have extra copies of crossword puzzles, word finds and/or connect the dots for when children finish one component of the program and are waiting to proceed to the next station.

Note: If possible, try to have at least one other person help you with this program. Depending on how many children you expect for a program, you may want to have different groups of children doing different activities after finishing the interactive story. For instance, while you are supervising the scavenger hunt and craft portions, another person may be conducting the Alien Wall portion of the program. The two groups can then switch. Although this can be a bit chaotic, it reduces long line-ups and boredom among the children.



Four Weeks of Outer Space Fun

- ◇ Choose a theme song for your meetings to get everyone in the mood. Each week do it differently (slow, fast, loud, high-pitched, on one foot, doing a moonwalk, etc.)
- ◇ Create groups with planet names. Get the groups to mix up the letters to make a new name for the duration of the Summer Reading Club (SRC). Give each group a piece of bristolboard and get them to think up a cheer or anthem for

their planet based on the first letters in their planet's name. Each group can deliver their cheer or songs at the beginning of each meeting.

- ◇ At each meeting, read a book that relates to the aspect of **Blast Off!** that you want to do that week and/or read a chapter a week from a longer work.
- ◇ Have each child write or draw a space journal over the time of the SRC. It will include both fact and fiction by the end, based on your weekly topics/reading.
- ◇ Create a memory game. Take a combination of 6 to 10 pictures of space book characters, planet symbols (maybe use the SRC clip art) and create a matching memory game or two for children to use when they have finished other planned activities. A couple of different games can be laminated fairly cheaply.
- ◇ Always have word searches, colouring pages, puzzles on hand for those who finish activities faster than others.

Program 1 ideas

- ◇ Theme song and cheers
- ◇ Have non-fiction books on planets available for reference. Planet groups choose their names and create their cheers/songs on bristolboard.
- ◇ Read **Alistair and the Alien Invasion** and/or **Stella Princess of the Stars**; begin a chapter book that you'll read from week to week.
- ◇ Make space galaxy mobiles to hang in the library or storyroom. See http://spaceplace.jpl.nasa.gov/en/kids/galex_make2.shtml for an example that can be simplified to suit a varied age group. Basically you will need cardboard, fishing wire, coloured paper, glue and glitter.

Program 2 ideas

- ◇ Theme song and cheers
- ◇ Read **The Orphan Boy** and/or **The Star Maiden: An Ojibway Tale** or **Tinker and Tom and the Star Baby**; read a chapter from your chapter book choice
- ◇ Space Journal: Have a selection of non-fiction and fiction books about planets, life on planets, and space travel on hand. Ask children to begin writing a journal about their imaginary planet. What would life be like? What is the environment like? What kind of creatures? How do they get around? How do they speak? What is the food like?
- ◇ Sing "One little, two little, three little aliens" song. P. 63.
- ◇ Hold a space tongue twisters (see logbook) contest to illustrate how difficult it might be to learn a space language.

Program 3 ideas

- ◇ Theme song and cheers
- ◇ Read **Jimmy Zangwow's Out-of-this-World, Moon-Pie Adventure**
- ◇ Have non-fiction books about rockets/spaceships on hand.
- ◇ Space Journal: Building a rocket ship/spaceship. Have children write or draw their plan in the journal.
- ◇ See <http://www.enchantedlearning.com/crafts/astronomy/rocket/> for instructions on how to build individual rockets using paper towel rolls, foil and

crepe paper, OR make spaceships as follows: Decorate two paper plates with markers, crayons, or paint. Draw windows, doors, and *alien* symbols, on the plates. Attach a string through the middle of the top plate. Then punch holes around the rim (with the two plates together so the holes are lined up) and weave coloured yarn or string through the openings, tying a knot at the end.

- ◇ Song “Flying to the Moon” p.62
- ◇ Space Rocket Activity: Space Rocket p. 62

Program 4 ideas

Hold an Alien Day. Ask children to come dressed as aliens.

- ◇ Theme song and cheers
- ◇ Read **The Trouble with Gran** or **Zebo and the Dirty Planet** and/or **Midnight Visit at Molly’s House**
- ◇ Play the game *I’m Going to Mars and I Have to Take . . .*
- ◇ Space Diary: Have the children create an *Alien Day* newspaper page about someone from another planet visiting their planet or about their trip to another planet. Perhaps they could interview one of the other aliens present that day.
- ◇ Have children create the alien creature from their own group planet. You will need a long piece of drawing paper or several taped together so that a tall life form can be created. These creatures can then be displayed in the library.
- ◇ Play a version of ring-toss but call it *Saturn’s Rings*.



Space

Welcoming:

Play the CD – “2001: A Space Odyssey” or “Also Sprach Zarathustra” on which the movie’s theme was based.

Craft: My Pet Alien

Create “My Pet Alien” and paper bag (home/carrier) decorated by the children. See p.100

Certificate- Name, Nickname, Planetary Address, Favourite food, Favourite book – to be completed by children. See p. 39

Video:

At the end of the program – for children who have finished the craft and are waiting to be picked up: “The Wonders of Earth & Space”

National Film Board (NFB) short film – “Satellites of the Sun” – 12 minutes

Book:

MoonBall by Jane Yolen

Booktalk some of the many novels of aliens visiting Earth.

Game: Planet Match Up

Children are shown actions that correspond to the planets: Pluto (Squat and curl to look smaller); Saturn (Arms over head); Jupiter (Stand on tiptoes and look big); Mercury (Fanning to keep cool). Children are secretly told what planet they are. Everyone starts to act out their planet. As they do this they are to identify the other children who are acting out the same planet. The first group to gather together and shout out their planet wins!

My Pet Alien

Certificate of Ownership

Name _____

Nickname _____

Date of Arrival to Earth _____

Alien Came From _____

Favourite Food _____

Favourite Book _____



Library Scavenger Hunt

Welcome: “We are here today to explore the mystical reaches of Outer Space. The moon and stars, high in the sky, are our window on the infinite Universe. We have tried to recreate this vastness in our library today, so are you ready? Ready to boldly go, where no man has been before? The only tools at your disposal are a quiz sheet and a pencil. With these you can unlock the secrets of the Universe. Are you well and truly ready???”

Scavenger Hunt: Hand out quiz sheets and pencils. Be available to answer questions. Tell participants to come to you when they have finished

Prizes: *Well Done* stickers and/or a certificate

Preparation:

Copy enough quiz sheets and certificates.

Perhaps have word searches and colouring sheets for before and after

Place planets on appropriate books before starting – this can highlight your collection or books dealing with the theme – space-themed craft books, space poetry, history of space travel, books about planets, science fiction novels, etc.

Place the Big Dipper on the north wall before program.

Make sure there are some astronomy books in the 133.5 section

The Scavenger Hunt, Quiz Sheet, Certificate, Planet Clip Art and Big Dipper can be found on pps 99-105 of the manual.



Do They Come from Outer Space?

Ages 8-13

INTRODUCTION

Using the bibliography attached, present information about the following phenomena. For each place, put a pin on a map of the world where they are located.

A. CIRCLES

Present information about circles in history and their importance, for example: STONEHENGE, AVEBURY
STONE CIRCLES, CROP CIRCLES
Show pictures

B. LANDSCAPE CARVING

What it is and the legends behind the art
Wiltshire area
White horses
Show picture

C. MOUNDS

What they are
Origins
Show pictures

CRAFT

Nazca lines or mounds

Supplies:

Stiff cardboard
Glue
String
Pencils
Scissors

Draw free form shape (for Nazca lines) or swirl (for mounds) on cardboard, dribble glue along line, place string in glue following lines.

Bibliography

Adult Materials:

Cavendish, Richard **Unsolved Mysteries of the Universe**
Delgado, Pat

Circular Evidence: A Detailed Investigation of the Flattened Swirled Crops Phenomenon

Madison, Joyce **Great Hoaxes, Swindles, Scandals, Cons, Stings and Scams**

Marple, Morris **White Horses and Other Hill Figures**

Muir, Richard

Riddles in the British Landscape

Shetrone, Henry Clyde **The Mound Builders**

Children's Materials:

Guinness Book of Records

Berger, Melvin

UFOs , ETs and Visitors from Space

Crawford, Sue **Mysteries of the Unexplained**

Matthews, Rupert **Ancient Mysteries**

O'Neill, Catherine **Amazing Mysteries of the World**

Shemie, Bonnie **Mounds of Earth and Shell: Native Sites**

Silverstein, Herma **Hoaxes that made Headlines**

Steele, William **Talking Bones: Secrets of Indian Burial Mounds**

Wilding-White, T.M. **All About UFOs**

Websites:

"Kidsclick!" Collection of sites about aliens

<http://sunsite.berkeley.edu/cgi-bin/searchkids.pl?searchtype=all&keywords=aliens&title=Aliens>

National Geographic World wants to know: "Are Aliens Invading New Mexico?"

<http://www.nationalgeographic.com/ngkids/9807/aliens/index.html>

A short play to put on about aliens

<http://pbskids.org/zoom/activities/playhouse/yareckon.html>



Contest: Word Whirl

How many words can you make from the phrase "Unidentified Flying Object"? You may use the letters in any order you like, but you can't use letters more often than they appear in the phrase. That is, you can use one 'u', three 'i's, etc.



Star Trek and Star Wars Academy Entrance Program

Introduction—quick discussion of Star Trek and Star Wars
Favourite episode, favourite character, explain why they like it
More Star Trek trivia can be found by typing “Star Trek Trivia” into any search engine

You know you’re a Trekkie when...

Your fly swatter has a stun setting.

You say “energize” every time you stand on a round manhole cover.

Your pat response to anything of interest is to lift one eyebrow and say “Fascinating.”

Your teacher tells you to take off those silly pointed ears but you can’t because they are surgical implants.

Have the participants come up with their own ideas.

Star Trek Communicator Pins

Materials: Juice can lids (silver tops from concentrate cans)
Silver paper
Gold paper
Large safety pins

Cut out a gold circle the size of the lid and glue onto the lid
Cut out a silver triangular shape and glue over top of the gold circle
Tape safety pin to back (see p.106) for patterns

Universal Translator

Have participants “decode” the message (See pp.106-108)

(Answer: Beam me up Scotty, there’s a wookie on my tail)

Star Fleet Entrance Exam (answers in brackets)

Take exam as a group or in pairs or on their own

1. Tom Paris's father is a(n)
 - Ensign
 - Lt. Commander
 - Lieutenant
 - Commander
 - Captain
 - Admiral
 - Ambassador (Admiral)

2. What do Quark and Rom call their Mother?
 - Moogie
 - Mom
 - Pel
 - Morn (moogie)

3. One of Captain Picard's ancestors won a Nobel Prize in...
 - Physics
 - Chemistry
 - Literature
 - Peace (Chemistry)

4. Dr. McCoy uses what as a spice when cooking beans?
 - Sugar
 - Tennessee Whiskey
 - Brandy
 - Peas (Tennessee Whiskey)

5. What is Dr. Soran's first name?
 - Aurian
 - Arjen
 - Tolian
 - Zodian (Tolian)

6. Give the names of all the *Enterprise* captains
 - NCC 1701 1ST CAPTAIN (Robert April)
 - NCC 1701 2ND CAPTAIN (Christopher Pike)
 - NCC 1701 3rd CAPTAIN (James Kirk)
 - NCC 1701 A (James Kirk)
 - NCC 1701 B (John Harriman)
 - NCC 1701 C (Rachel Garrett)
 - NCC 1701 D (Jean-Luc Picard)
 - NCC 1701 E (Jean-Luc Picard)



Beyond the Pages

DESCRIPTION:

- A reading and writing discussion group for 9 to 12 year olds.
- This program can be run in two sessions or as a two-hour workshop.

HOW TO DO IT:

Advance preparation:

- Choose a theme for the program.
- Make up a SHORT list of books to read. 10 to 12 titles - readily available in multiple copies. Include a variety of reading levels but try to be consistent with the interest level of the age group.
- Make the booklist available at least one week before the program begins, preferably more if the books are longer.
- Participants should be able to read at least three of the books by the time the program starts. The program leader should have read the books as well.
- Prepare a list of questions to get discussions started. Seven to 10 questions should be enough.

Session 1

- Ask which books each child has read. Discuss the similarities and differences between them.
- Near the end of the session, steer the discussion to the kind of stories the children would write on this topic. Get them thinking of ideas for their own stories.
- Participants then go home (or separate) to write out their own stories.

Session 2

- Read each of the participants' stories aloud. Discuss using some of the same questions as in the first session.

EXAMPLE:

Theme: ALIEN ENCOUNTERS

Booklist:

AUTHOR	TITLE	# of pages
Brewster, Patience	ELLSWORTH AND THE CATS FROM MARS	32
Bunting, Eve	WANNA BUY AN ALIEN?	92
Duffey, Betsy	ALIEN FOR RENT	71
Hughes, Monica	GOLDEN AQUARIANS	171
Scieszka, Jon	BALONEY, HARRY P.	Unpaged
Scrimger, Richard	NOSE FROM JUPITER	156
Spinner, Stephanie	ALIENS FOR DINNER	78
Weston, Martha	SPACE GUYS	32
Willis, Jeanne	DR. XARGLE'S BOOK OF EARTHLETS	26

Discussion Questions:

1. Which story did you like best? Why?
2. Use one word to describe that story. Funny? Exciting? Scary?
3. Were there any human characters in the story that you read? Who were they?
4. What kind of person was this character at the beginning of the story?
5. Did the character(s) change by the end of the story? How and why?
6. Were any parts the same in each story?
7. Where did each story take place? – In a spaceship or on a planet?
8. When did each story take place? – The future or the present?

9. Did the time and/or location have anything to do with the way the characters behaved?
10. Did you learn any facts about alien creatures from these stories?

Try writing your own SHORT story of an alien encounter - one or two pages long.



How the Moon, Stars and Sun Got into the Sky - An Interactive Story

The story can be found at: <http://www.scoutingbear.com/audience/moon.htm>

Give each child one of the cards found on pp. 95-98

This will tell them which sound to make as you read out the story.



Donald the Explorer in Outer Space

Divide audience into four groups and give each group an action to perform throughout the story.

DONALD Is there anybody there? (searching gesture with hand over eyes) (15)

STARS Twinkle twinkle (hold hands up in the air and wiggle fingers) (8)

MOON Shine (make big circle with hands) (9)

ROCKET Zoom! (make pointed rocket nose with hands over head) (10)

SPACE CREATURES Beep beep boing (raise both index fingers on top of head for antennae) (8)

DONALD was an explorer who had explored all over the Earth looking for exotic creatures. **DONALD** had explored to the deepest depths of the Amazonian jungle. **DONALD** had explored the furthest snowy wastes of Antarctica and the highest mountains of the Himalayas. **DONALD** had even explored the noisy streets of New York City. He had been everywhere!

One night, while **DONALD** was exploring the wide open plains of Africa, he happened to look up at the vast canopy of **STARS** as he sat by his campfire. The **MOON** began to appear over the horizon looking so huge and near among the **STARS** that **DONALD** had an idea. The **MOON** looked like such an interesting place to be, that there must be some **SPACE CREATURES** living there. It was time therefore for

DONALD to visit the **MOON**. So **DONALD** traveled home and got in touch with a friend from NASA who built him a **ROCKET** and off he went to the **MOON** in his **ROCKET** admiring the **STARS** as he went and imagining all the little **SPACE CREATURES** he was going to meet.

DONALD'S ROCKET made a smooth landing on the **MOON** and out he stepped in his **MOON** suit to look for **SPACE CREATURES**. As **DONALD** boinged along in the low gravity he felt as if he was jumping to catch the **STARS** and he traveled quickly all over the surface of the **MOON** looking for **SPACE CREATURES**. It was not long before **DONALD** started to get disheartened because he hadn't found a single **SPACE CREATURE** anywhere on the **MOON**. All he could see were **STARS** and he was nearly back at his **ROCKET**. Suddenly, as **DONALD** rounded a rocky outcrop, he came across an enormous **ROCKET**, twenty times the size of his **ROCKET**. And, gathered all around this **ROCKET** were what looked like a family of gigantic **SPACE CREATURES** having a picnic under the **STARS!** **DONALD** had never imagined that **SPACE CREATURES** would be that big! He always thought of **SPACE CREATURES** as being quite small! He was so scared that he turned and ran! (Boing, boing boing) Luckily his own **ROCKET** was nearby and he was soon inside and pointing to the **STARS** and home.

The **ROCKET** blasted off from the **MOON** and turned towards Earth. **DONALD** traveled back through the **STAR** spangled sky and finally landed in the middle of the Pacific Ocean. As his **ROCKET** plunged underwater into the briny depths it kept on traveling downwards past strange and wonderful sights. **DONALD** realized that he has still not seen everything there was to see back on Earth, but that is another story.



Spaceship Spaceship Spaceship, Blastoff!

Play this game by seating the children in a circle. One child is the astronaut and walks around the outside touching children's shoulders and saying:

Spaceship, spaceship, spaceship, spaceship.....
Blast Off!

When he says "blast off", the child touched chases him around the circle. The one who does not "Splash down" in the empty space becomes the astronaut and the game continues.



Bingo

On p.109 can be found the master sheet for all of the categories and lists for the bingo. Pre-print blank bingo cards on heavier paper, to equal the number of children you expect for the program. Print out the items to be inserted on the bingo cards (astronauts, constellations etc.). The easiest way to do this, if it can be managed, is to print the different categories on different colours of paper. That enables the person

running the program to tell children to glue five blue sheets, five pink sheets etc. onto their bingo card. There will obviously be extras as there won't be room for all the options on the bingo card, but children really enjoy making their own cards as it gives them a little more incentive to play.

Once the cards are done, start playing bingo as you normally would. The great thing about having the participants make their own cards is that this takes the first 20 minutes or so of an hour-long program, the children don't get bored as easily and because the card was their own creation they stay interested for longer.

NOTE: Some of the following also appear in the logbook.



Did You Know Facts

The word *eclipse* comes from the Greek word for “abandonment” because it looked to the Greeks like the sun was abandoning the Earth.

The word *astronaut* is Greek for “sailor of the stars.”

Astronauts’ footprints will stay in the moon’s fine dust for millions of years, since the moon has no wind or rain to erase them.

Like Mercury, Venus’ day is longer than its year. The unique thing about Venus is that it rotates backward compared to the other planets.

Canadian astronaut Chris Hadfield plays bass guitar in an all-astronaut band named MaxQ.

For those born on March 8, 1969, the day was even more special. The Apollo IX astronauts performed “Happy Birthday,” the first song ever sung from outer space.



Gross Space Facts

There are no washing machines in space! So, what’s a ‘naut to do for a six-month voyage? That’s right, they have to wear the same clothes, even underwear, over and over again.

(Source: http://www.space.gc.ca/asc/eng/astronauts/living_hygiene.asp)

Everything floats in space—even spit from brushing your teeth! Astronauts can now use a special kind of toothpaste that doesn’t need to be spit out. Can you imagine swallowing your toothpaste after you brushed your teeth? Eww...

(Source: http://www.space.gc.ca/asc/eng/astronauts/living_hygiene.asp)

Toilets on Earth use water to flush down wastes. But water would just float around in space. To use the bathroom in space, astronauts use a toilet that works like a vacuum cleaner to remove wastes.

- (Source: http://visitor.broaddaylight.com/spacekids/FAQ_65_5332.shtm)



Space Jokes

What do you call space insects?
Astro-gnats.

What's mad and flies to the moon?
A Loony Module.

Why is Saturn like a jewelry box?
Because it has so many rings.

When is a window like a star?
When it's a skylight.

What kind of light goes around the Earth?
A Satel-lite.

What kind of poem can you find in outer space?
A Uni-verse.

Why is a half moon heavier than a full moon?
Because a full moon is lighter.

What travels around the Earth without using a single drop of fuel?
The Moon.

Why is the North Star the smartest star?
Because it's the brightest.

What did the big rocket say to the little rocket?
Take off, kid.

What planet can you see everyday?
Earth.

How are false teeth like stars?
They come out at night.

Why did the Martian take a shovel into space?
To dig a black hole.

Who was the first man in space?
The man in the moon.

Who made a spaceship that couldn't get off the ground?
The Wrong Brothers.

What's a satellite?
Something a cowboy puts on his horse at night.

How did Mary's little lamb get to Pluto?
By rocket sheep.

When does the cow jump over the moon?
When it's in the MOOd.

What baseball game might be played in outer space?
The Astros versus the Angels.

What would you get if you crossed a comet with a guppy?
A Starfish.

What goes up when you count down?
Rockets, Space Shuttles.

Why is the sun the smartest star?
Because it's so bright.

When is the hardest time to get a ticket to the moon?
When the moon is full.

What letter has traveled further than any other?
The letter 'D'. It has gone to the end of the world.

Why did Mickey Mouse take a trip to outer space?
He wanted to find Pluto.

What are the noisiest things in space?
Shooting stars.

What's another name for an astronomer?
A night watchman.

Why are robots so brave?
They have nerves of steel.

If the moon revolves around the Earth, and the Earth revolves around the sun, where are all the stars?
In Hollywood.

Why is the moon like a dollar?
Because it has four quarters.

What kind of dish is out of this world?
A flying saucer!

Which planet can you see both day and night?
The Earth.

Why did the police officer put the star in jail?
It was a shooting star.

Why is the letter 'T' so powerful?
It can make a star 'start'.

What has been here since the world was first made, but is just a month old?
The Moon.

At night, what comes without being fetched, but by day is lost but not stolen?
Stars.

What was the name of the first satellite to go around the Earth?
The Moon.

Which relative visited the astronauts in space?
Auntie Gravity.

When does an astronaut have his mid-day meal?
At launch time.

Where do astronauts leave their spaceships?
On parking meteors.

What does an astronaut do when he gets angry?
Blasts off!

If an athlete gets athlete's foot, what does an astronaut get?
Missile toe.

How do you get a baby astronaut to sleep?
Rocket.

What do astronauts use to play badminton?
Space Shuttles.

What do astronauts play football on?
Astro-turf.

Why couldn't the astronaut make cinnamon toast?
He was in outer space.

How is an astronaut like a football player?
They both make touchdowns.

What's an astronaut's favourite place on a computer?
The space bar.

Where do astronauts go for refreshment when they're on the red planet?
Mars bars.

What do you call a mad astronaut?
An astronut.

What did the astronaut see in his frying pan?
An unidentified frying object.

Why are astronauts highly successful people?
They always go up in the world.

Why are astronauts' careers short-lived?
After they're hired, they're fired!

Why do astronauts blast-off at noon?
Because 12 o'clock is the time for launch.

Which aliens are like soldiers?
Martians, because they go Martian along.

How do Martians make their coffee?
The Milky Way.

What burns the fuel on the Star Trek ship *Enterprise*?
Spock Plugs.

What would you get if you crossed a Star Wars movie with tomato sauce?
Jabba the Pizza Hut.

Where should a 500 pound alien go?
On a diet!

What's soft and white and comes from Mars?
Martian-mallows.

Who is the tallest Jedi?
Luke Skyscraper.

In which *Star Wars* movie did Darth Vader play a referee?
The Umpire Strikes Back.

Where are dead Martians listed?
In the orbit-uaries.

What movie are alien toads in?
Star Warts.

How does Han Solo get from one spaceship to another?
Ewoks (he walks).

Who served Yoda at his favourite restaurant?
Darth Waiter.

What do you do with a green alien?
Wait until it ripens.

Imagine you were on Mars, surrounded by Martians. What would you do?
Stop imagining.

What does Obi Wan Kenobi shave with?
A laser blade.

What action figure has a red face and a light saber?
Darth Small.

What do you call a two-year-old Russian who explores outer space?
A Cosmotot.

What do you call a moon that isn't hungry?
Full.

What do you get when you touch a Martian toad?
Star Warts.

Before Pluto was discovered, how many planets were there?
The same number as there are now.

When I travel in the Space Station I can look out the window and see the sunrise.
That's nothing I can sit in my home and watch the kitchen sink.

On my last space flight, I didn't sleep for 10 days.
Wow! Weren't you tired?

No, I sleep nights.

Where do you go ice-skating in outer space?
The rinks of Saturn.

What does a Martian take when he is dirty?
A meteor shower.

What's the fastest way to get to the moon?
Climb into an elephant's trunk and tickle him.

What's the difference between the moon and the sun?
They're as different as night and day.

Who is Darth Vader's wife?
Ella Vader.

What do you call a chicken from outer space?
An eggs-tra-terrestrial.

What do you call an unidentified flying cow?
A Moo-F-O.

What do little Martians learn at camp?
Arts and spacecrafts.

What is the baseball version of *Star Wars*?
The Umpire Strikes Back.

What's moon juice called?
Craterade.

What do you call the man who fires all the rockets at the space centre?
Sir Launchalot.

What goes "Mooz"?
A spaceship flying backwards.

What kind of food do astronauts eat?
Launch meat.

How do astronauts sleep in their spaceship?
With their eyes closed.

Why is being an astronaut a strange job?
You have to be fired before you can work.

What do planets like to read?
Comet books.

Why did the silly astronaut think he was so bright?
Because his mother always called him "Sonny." (sunny)

Why are Lassie, Mickey Mouse and a meteor the same?
They are all stars with tails.

Why did the silly astronomer hit himself over the head?
So he could see stars all day.

What is always in front of an astronaut, but cannot be seen?
The future.

What meal do astronauts like best?
Launch.

What do you get when you cross an elephant with a computer?
A five-ton know-it-all.

What did one calculator say to the other calculator?
You can count on me.

What does a mechanical frog say?
Robot, Robot.

What did they write on the robot's tombstone?
Rust in Peace.

Why do astronauts wear bullet-proof vests?
To protect themselves from shooting stars.

What happened when E.T. put too much soap in the washing machine?
E.T. foam home.

What is Mickey Mouse's favourite planet?
Pluto, of course.

Why is the planet Saturn like a telephone?
Because it has so many rings.

What do you call bugs on the moon?
Luna-tics.

What do atomic scientists eat for lunch?
Fission chips.

What is the difference between a dog covered with fleas and an astronaut sitting in a rocket on a launching pad?
One is going to itch, the other is itching to go.



Space Time Line

- 1473 Nicolaus Copernicus was born in Poland. He was the first to discover that the sun was at the centre of our planetary system.
- 1564 Galileo Galilei was born in Italy. He was the first to use a telescope to explore the night sky.
- 1642 Isaac Newton, the discoverer of how gravity works, was born in England.
- 1730 Comet hunter Charles Messier was born in France.
- 1786 Discovery of Comet Encke. This comet is well known because it only takes 3.3 years to orbit the sun
- 1792 Sir John Herschel was born in England. He discovered the planet Uranus.
- 1811 Urbain Le Verrier was born in France. He discovered the planet Neptune.
- 1843 Discovery of the Great Comet of March, believed to be one of the brightest comets of all time.
- 1855 Percival Lowel was born in the U.S.A. He studied and mapped Mars.
- 1879 Albert Einstein, the father of the theory of relativity, was born in Germany.
- 1903 Wright Brothers made first successful airplane flight.
- 1930 Discovery of planet Pluto by Clyde Tombaugh.
- 1930 Neil Armstrong, the first man to walk on the moon, was born in Ohio.
- 1947 Charles E. Yeager flew the first airplane to travel faster than the speed of sound.
- 1956 Discovery of Comet Arend-Roland. This comet's tail was 30 degrees long and covered one-fifth of the sky.
- 1957 Sputnik 1 was the first spacecraft to orbit Earth.
- 1957 Sputnik 2 was the second spacecraft to orbit Earth. It carried a dog called Liaka.

- 1958 NASA became operational.
- 1959 Jupiter 1 - Carried two monkeys Able and Baker on a 15-minute ride in space.
- 1959 Luna 3 - Returned the first images of the far side of the moon.
- 1960 The SETI (Search for Extra Terrestrial Intelligence) project was born.
- 1961 Mercury MR-2 made the short flight with a trained chimpanzee called Ham.
- 1961 First man in space Yuri Gagarin orbited the Earth in less than two hours.
- 1961 Alan Shepard Jr. the first American in space aboard Mercury 2, made 15 flights at the speed of 8000 km/h.
- 1961 Enos a trained chimpanzee made two orbits around the Earth.
- 1962 John Glenn became the first American in orbit. He completed three orbits of Earth.
- 1962 Mariner 2 was the first spacecraft to encounter another planet.
- 1963 Valetina Tereshkova was the first woman in space.
- 1965 Edward White was the first American to make a spacewalk.
- 1965 First successful Mars flyby returned the first images of Mars.
- 1968 Apollo 8 - Manned lunar orbiter circled the moon on Christmas Eve.
- 1969 Apollo 11 - First manned lunar landing. Neil Armstrong and Edwin Aldrin Jr. were the first to walk on the moon. "That's one small step for man, one giant leap for mankind."
- 1970 Venera 7 - First to return data after a soft landing on another planet.
- 1971 Apollo 14 - Third manned lunar landing. Carried seeds of five species of trees that grew normally when they were returned to Earth. They were known as 'moon trees.'
- 1972 Venera 8 - Produced data on Venusian surface conditions.
- 1972 Apollo 17 - The sixth and last manned mission to the moon with the first scientist to walk on the moon geologist Harrison Schmitt.
- 1973 Pioneer 11 - First to explore Saturn.
- 1973 Skylab 1 - Launched and used by astronauts for experiments.
- 1973 Skylab 2 - Astronauts were occupied for 28 days making repairs involving three spacewalks.
- 1973 Mariner 10 - The first spacecraft to use gravitational pull from one planet to reach another.

- 1973 Pioneer 10 - Jupiter flyby provided images of the Great Red Spot.
- 1975 Apollo-Soyuz Test Project took the first photograph of a star.
- 1975 Viking 1 - Mars orbiter lander launched.
- 1976 Viking 2 - Mars orbiter and lander studied the surface of Mars for four years.
- 1977 Voyager 2 launched and flew by Jupiter, Saturn, Uranus and Neptune. It discovered 24 new satellites.
- 1978 Rolf Meier first Canadian to discover a comet.
- 1981 First flight of an aircraft (space shuttle *Columbia*) able to land after orbiting.
- 1981 Venus orbiter and lander (Venera 3) drilled into rocky surface and analyzed its composition.
- 1984 Marc Garneau first Canadian to go into space. He spent eight days in orbit aboard *Challenger*.
- 1985 First Japanese spacecraft (Sakigate 7) to orbit a planet and visit a comet.
- 1986 Voyager 2 - First spacecraft to reach Uranus.
- 1989 Voyager 2 - First spacecraft to reach Neptune.
- 1990 Hubble Space Telescope placed into orbit.
- 1992 Roberta Bondar first Canadian woman in space aboard *Discovery*.
- 1992 Canadian Steve MacLean spent nine days in orbit aboard *Columbia*.
- 1993 Galileo orbiter encountered asteroid Ida with its own tiny moon.
- 1993 Space shuttle *Endeavour* met up with the Hubble Space Telescope in space and repaired it.
- 1994 American and Russian astronauts flew their first joint shuttle mission in the space shuttle *Discovery*.
- 1995 Canadian Chris Hadfield spent eight days in orbit aboard *Atlantis*.
- 1995 Galileo orbiter released probe into Jupiter's atmosphere.
- 1996 Canadian Bjarni Tryggvason went into space for 11 days in orbit aboard *Discovery*.
- 1996 Galileo orbiter flew near Callisto the outermost of the four large moons of Jupiter.
- 1998 Canadian Dafydd Williams went into space.
- 1998 Canadian Marc Garneau went into space for a second time aboard *Endeavour*.

- 1999 Canadian Julie Payette went into space for 10 days aboard the shuttle *Discovery*.
- 2000 Canadian Marc Garneau's third space mission.
- 2001 Chris Hadfield delivered Canadarm2 to the International Space Station. He became the first Canadian to perform "extra-vehicular activity." (spacewalk)
- 2002 Canada's Space Work Platform installed on the Space Station.
- 2004 First two-person crew spacewalked at the Space Station.