Walt Disney

PERSONAL COMPUTER SOFTWARE

MICKEY'S SPACE ADVENTURE

An adventure game through our solar system for ages 8 and up

SIERRA

MICKEY'S SPACE ADVENTURE

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A NOTE TO PARENTS:

MICKEY'S SPACE ADVENTURE

Playing for Fun/Learning for Life

Walt Disney Personal Computer Software for your Tandy Computer will capture your child's imagination while developing necessary skills and building knowledge. Your child's attention is engaged with stunning graphics, delightful characters, and compelling and challenging activities.

Mickey's Space Adventure, recommended for ages 8 and up, reinforces reading comprehension, problem solving, logical thinking and mapping skills. In addition, it teaches interesting facts and concepts about our solar system. Your child will learn:

1. The names of the planets.
2. The order of the planets from the sun.
3. The concepts of planet rotation and revolution around the sun.
4. The characteristics of many of the planets and moons.
5. The concept of gravity.
6. The relative sizes of the planets.
7. The general nature of each planet (gaseous or solid).

For a child already interested in the planets, Mickey's Space Adventure will be a fantastic journey. For those who have not yet experienced the fascination of outer space, Mickey's Space Adventure is the passport to vistas yet unimagined!

Note: Although most of the facts about the planets are true, as of 1986, there are two exceptions. The planets in the Alpha Centauri system, the stellar system closest to our own, have not been named—or even discovered—by astronomers. Therefore, the planet Oron is fictitious. And of course, there is no known life on other planets in our own solar system. The extra-terrestrials Mickey and Pluto meet spring from the imaginations of the design team. These creatures do, however, reflect environmental characteristics of the planets or moons on which they "live." Also, while Mickey and Pluto travel quickly from one planet or moon to another in the game, in reality, such journeys would take considerably longer—sometimes many years.

To take full advantage of the rich curriculum presented in Mickey's Space Adventure, refer to the expanded section on the planets, and the glossary of terms at the back of this Player's Guide.

THE MYSTERY OF THE LOST CRYSTAL

On Oron, a planet in the neighboring Alpha Centauri stellar system, an arch-criminal crept into the Hall of Records. He stole only one thing: the precious memory crystal that recorded the entire history of the planet Oron.

He fled to the far edge of the stellar system, where he called back to the planet Oron to state his demands.

"I want to be proclaimed ruler of Oron," he said. "If you don't yield to my wishes, I will break the crystal up in small pieces and hurl it far into the galaxy!"

Oron's officials wanted the memory crystal back, but not at the price of their entire planet. So, they refused the criminal's demands.

"Then be forever more a planet without a past!" he cried, breaking the crystal into pieces. He ejected them from his spaceship, and fled into the far-beyond, where he was later captured.

Oronian scientists searched the heavens until their tracing devices picked up nine small objects moving steadily away from their stellar system—the crystal pieces! By plotting their course, the Oronians estimated that the crystals would come to rest in the neighboring stellar system. They would look for them there.

The next stellar system in the galaxy was 75 years away, by even the most advanced space travel. The Oronian life span was too short for someone to make the trip there and back again, so engineers designed a computer-controlled ship for the journey.

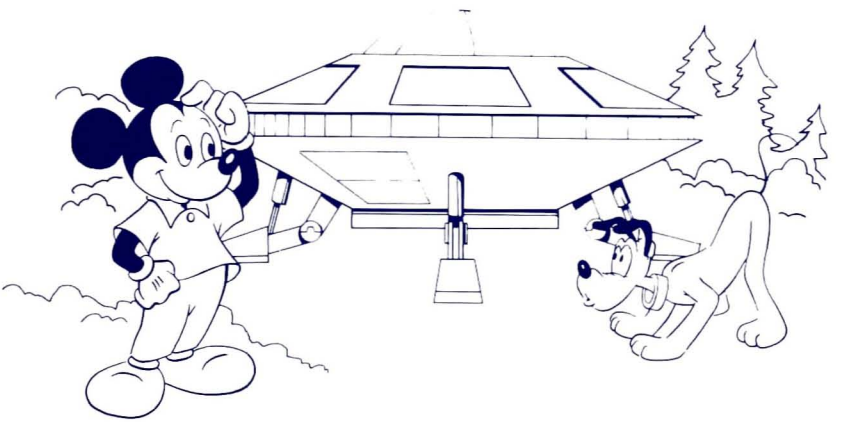
Since the memory crystal was not merely a rock but a miniature library of amazing complexity, the pieces had to be found and put back together in a specific order. Scientists installed a special device in the ship, which tracked the crystal pieces in the right order, one crystal at a time.

Hope was high as all of Oron turned out to watch the launch of the new spaceship, but some were skeptical. They knew that the spaceship couldn't bring back the memory crystal unaided. Once the spaceship landed on Earth—the planet where the first crystal was to be found, an inhabitant of the planet would have to find the crystal and bring it back to the spaceship. Someone would then have to pilot the spaceship to the next planet, then the next, until all the crystal pieces were found, in the correct order, and the crystal was whole again.

"What are the chances of finding intelligent life on the first planet?" they worried. "And even if the first crystal is found, who will be courageous enough to journey to the other planets? Will they be able to understand the computer's tracking system, and use the information to find the crystal pieces in the right order?"

OBJECT OF THE GAME

The spaceship from Oron has landed in the hills near Mickey's home. Exploring with Mickey and Pluto, discover the ship. Find the first crystal, then fly the spaceship to other planets and moons in our solar system, searching for the other crystals.



HOW TO PLAY

Remember that the crystal pieces must be found in a certain order. The ship's computer will give you hints. It is up to you and Mickey to follow the clues as you pilot the spacecraft. The homing device only works when you land on the planet where the next crystal piece is to be found. If you land on any other planet, you won't find anything there.

Create two-word commands by choosing words from the screen, one word from each line. Put them together to form commands such as "GO NORTH," "LOOK CRYSTAL" and "GET FOOD."

Use the "LOOK" command often to learn more about something of interest or to investigate situations which may not be clear to you. For example, if you're curious about what might be in a room, enter the command "LOOK ROOM."

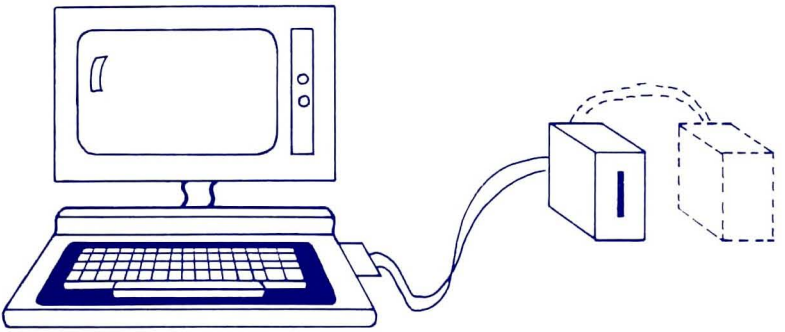
As you explore, you will come across different things that may help you. You should take them along on your journey.

To keep from getting lost, draw maps showing where you've been. Indicate objects found and landmarks you see along the way. Try every direction, or you may miss an important clue or a necessary tool!

CAUTION! Watch the air supply. The computer will let you know when it's getting low. To replenish it, return to the spaceship and remove the spacesuits.

Now, blast off with Mickey and Pluto. Help them rescue the past of an entire planet and its people.

LOADING INSTRUCTIONS



Note: the dotted lines represent the connection of additional add-on drive.

1. Turn ON your monitor or television set. (If you are using a T.V. set, select channel 3 or 4 and set the antenna switch on the T.V. to computer.)

2. Turn ON the computer.

3. Turn ON the disk drive.

4. *When you see the prompt:

   OK

   insert the Mickey's Space Adventure game disk side 1 into the disk drive and type:

   DOS ⟨ENTER⟩**

5. When you see:

   SHELL

   OS 9:

   type:

   MICKEY ⟨ENTER⟩

6. If you do not want to hear the title music when you first load the game, press the ⟨SPACEBAR⟩ until you are asked to press any key to continue.

*These instructions work on Color Computers with BASIC versions 1.1 or higher. If you have version 1.0 of BASIC, please see the special loading instructions in the Appendix.

**Note to the User: A word enclosed in ⟨ ⟩ brackets refers to a special key. When you see these symbols, it means press the indicated key. Example: ⟨ENTER⟩ means press the ENTER key.

CONTROL KEYS

a) Use the ⟨SPACEBAR⟩ or the arrow keys to move through your first-word options. (The left arrow, ←, moves the highlight bar to the left, and the right arrow, →, moves it to the right.)

b) Press ⟨ENTER⟩ to choose the word now highlighted on the first line.

c) If you want to cancel your selection and choose a different option, press⟨ ↑ ⟩.

d) Repeat steps "a" and "b" to select a word from the second line.

EXAMPLE:

If your options look like this:

	GO	LOOK	
EAST	WEST	ROAD	NORTH

and you want to look north, first use the spacebar or arrow keys to move the flashing box to the word LOOK, then press ⟨ENTER⟩. Next, move the flashing box to the word NORTH, and press ⟨ENTER⟩ again.

Press ⟨C⟩ to see a list of what, if anything, you are carrying.
Press ⟨S⟩ to turn sound off (and on again).
Press ⟨B⟩ to back up and re-read a description of the scene you are viewing.
Press ⟨F⟩ to change the color set on the computer.

Please note: The C, S, B, and F keys only work when the list of options appears at the bottom of the screen.

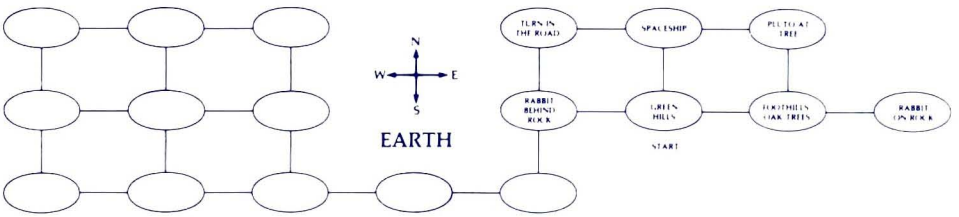
Press ⟨SPACEBAR⟩ to select a VERB and NOUN from the list of options or to see more text in a scene description. (Press ⟨SPACEBAR⟩ while loading the game to skip the music of the title screen.)

Press the ⟨BREAK⟩ key to get out of the game and back to the OS-9 prompt any time. If you use the ⟨BREAK⟩ key, however, your game will not be saved.

HOW TO MAKE A MAP

It is important to keep track of your progress by drawing maps. You should draw a separate map for each planet you visit, and each place you enter, like Mickey's house or the spaceship. Mark the compass directions on each map—north, south, east, and west. Keep in mind that in the game, you will always be facing north.

For each place you visit, think of a label that is somehow unique to that place. Mark that place on your map with the label that you have chosen. Here is a sample of the kind of map you should draw. Some of the places on Earth have already been labelled for you.



SAVING AND RESTORING GAMES

If you've been playing a while and want to stop, you can just turn off the computer. When you return, you will begin with a brand new game. Be sure to read the clues on the spaceship's computer, since you will have to retrieve the crystals in a different order this time.

If you would rather return to the game you're now playing, you can save it before you quit. Then, when you come back, you can start playing where you left off. In order to save a game, you will need a blank disk, or one that you won't mind copying over. Please be sure that this disk is formatted to work on your Tandy Color Computer.

HOW TO FORMAT A DISK

To format a disk for saving your game:

1. Follow steps 1 to 4 of the Loading Instructions on page 7 of this guide.

2. When you see the following words on the screen

   SHELL
   OS-9:

   remove the Mickey's Space Adventure disk from the drive and insert your OS-9 SYSTEM MASTER disk in the drive.

3. Type

   FORMAT /D∅ ⟨ENTER⟩

4. When the message

   COLOR COMPUTER FORMATTER
   FORMATTER DRIVE /D∅
   Y OR N
   READY?

   appears, insert a blank disk in the drive. Be sure the write-protect notch is NOT covered by a write-protect tab. Then, press

   Y

   The disk drive will format the disk.

5. The prompt

   DISK NAME:

   will appear on the screen. The name you give the disk is not important at this time, so type

   S ⟨ENTER⟩

6. A series of numbers and letters will appear on the screen as the disk is checked to make sure it can be formatted. If you receive a message that there are errors during the formatting, try again. Just remove the blank disk from the drive and insert the OS-9 SYSTEM MASTER in the drive. Repeat steps 3–5. If you continue to see errors, try a different blank disk.

7. Your formatted disk is now ready to use to save a game.

HOW TO MAKE A BACKUP DISK

If you want to make a backup copy of the Mickey's Space Adventure game disks, first follow the FORMAT instructions, then continue with the following steps.

1. Remove your formatted disk from the drive and insert the OS-9 SYSTEM MASTER disk.

2. Type:

   BACKUP /D∅ 4∅K ⟨ENTER⟩

3. When you see the question

   READY TO BACKUP FROM /D∅ TO /D∅?

   press Y to begin the backup.

4. The following message will appear on the screen
   READY DESTINATION, HIT A KEY

   Remove the System Master disk, insert the formatted disk (destination disk) in the drive, and press any key.

5. You will be asked if it is OK to scratch the disk in the drive. Press Y and begin the backup.

6. Follow the instructions on the screen to complete the backup. The backup alternately asks you to

   READY SOURCE, HIT A KEY

   and

   READY DESTINATION, HIT A KEY

Please note that SOURCE always refers to the disk you are backing up, while DESTINATION refers to the formatted disk which becomes your new backup disk. Repeat the entire FORMAT and BACKUP procedure for each side of the game disk you wish to backup.

Use your Mickey's Space Adventure backup disks when you play the game. Store the original game disks in a safe place.

HOW TO SAVE A GAME

1. Go to the room at the center of the spaceship. There, you'll see the words SAVE and GAME among your options.

2. Use the arrow keys and the ⟨Spacebar⟩ to highlight SAVE and GAME to enter the command SAVE GAME.

3. Follow the directions on the screen to insert your OS-9 formatted disk and assign your game a number (1–10). (See the above directions on HOW TO FORMAT A DISK.)

HOW TO RESTORE A GAME

1. To start playing where you left off, reload the game, and highlight the words RESTORE GAME in your first list of options.

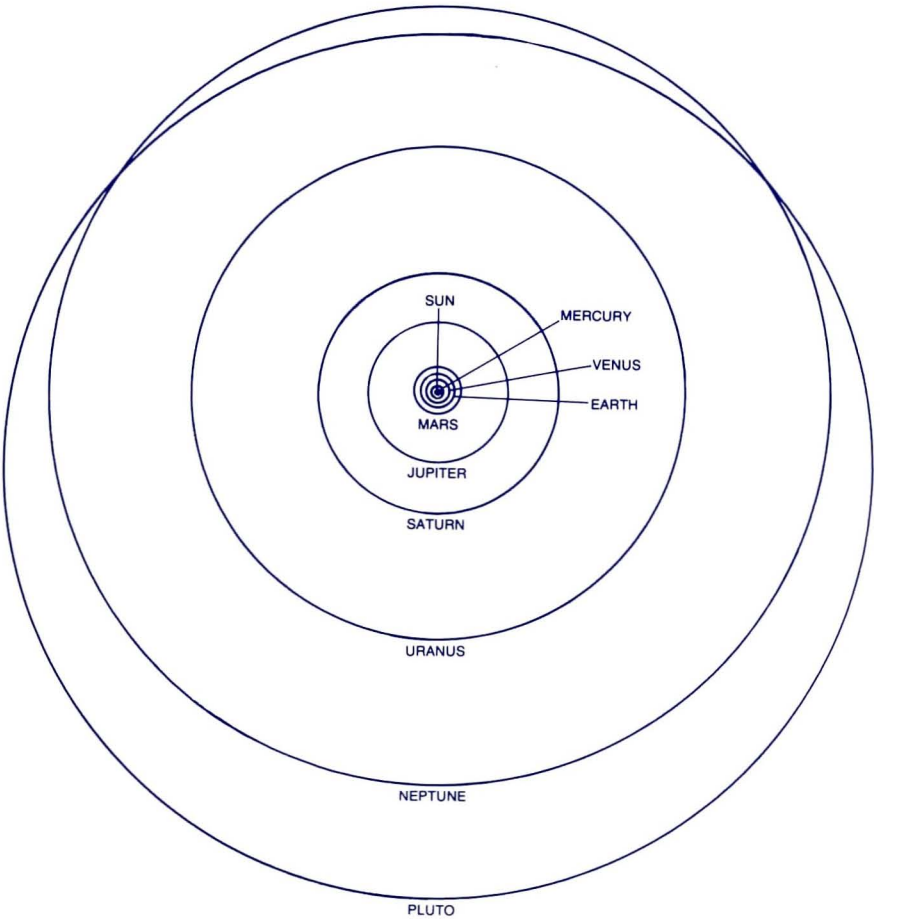
2. Follow the instructions to remove the game disk and insert your SAVE-GAME disk.

3. Enter the number of the game you want to continue playing. Soon you'll be playing your saved game.

Note: Up to nine games may be saved on each formatted disk. If you change your mind while you are in the process of saving or restoring a game, simply press ⟨ ↑ ⟩ before entering the number of a saved game.

ABOUT OUR SOLAR SYSTEM

We live in a solar system made up of one star (the sun), nine planets, more than fifty moons, and thousands of asteroids. The planets rotate around the sun, and each of the moons rotates around one of the planets. Pluto, the planet which is usually farthest from the sun, is over 3½ BILLION miles away from it. You can see that our solar system is a very large place indeed. Let's look briefly at each of the nine planets.



THE ORBITS OF THE PLANETS

MERCURY is the second smallest planet in our solar system. Because it is closest to the sun, Mercury's year is very short, only 88 Earth days. This is the amount of time it takes for Mercury to go around the sun. But because Mercury rotates very slowly, its day is long. Mercury looks scorched and rugged, much like our Moon. Temperatures can go up to 800°F on the side of Mercury facing the sun. But since Mercury has no atmosphere, the heat is quickly lost on the side facing away from the sun, where it is dark. Temperatures on the dark side can drop as low as −300°F!

VENUS is almost the same size as Earth. It is the second planet from the sun, and takes 225 Earth days to circle it. The planet's surface is dry and rocky. Venus is covered by a dense atmosphere, mostly made of carbon dioxide. Yellowish, sulphurous clouds block much of the sun's light. Surface temperatures reach up to 900°F on the side facing the sun. Nighttime temperatures are only 20–30°F cooler, since the dense atmosphere holds in most of the heat.

EARTH is the third planet from the sun. As far as we know, it is the only planet with large bodies of water. In fact, oceans cover approximately ⅔ of the surface of the planet. The other ⅓ consists of dry land ranging from the icy polar caps to deserts, to tropical forests. Temperatures on Earth range from far below freezing (32°F) to over 100°F, depending on the location.

Earth has one moon, which we see in the night sky. It doesn't give off any light of its own; it shines because it is reflecting light from the sun. Earth revolves around the sun once every 365 days. That's how we define a year.

MARS, the fourth planet from the sun, is smaller than Venus, but larger than Mercury. When you look up in the evening sky and see Mars, it looks red. That's why it is called "The Red Planet." Mars gets its red color from iron minerals that have rusted in the ground. The planet's surface is very windy and dusty, except for ice caps at the north and south poles.

Mars revolves around the sun once every 687 Earth days, so its year is almost twice as long as Earth's. Since it has only a very thin atmosphere, Mars is very cold. The average temperature is −150°F. Mars has two very small moons, called Phobos and Deimos.

There is a large space between the orbits of Mars and the next major planet, Jupiter. In this space are thousands of miniature planets called asteroids. Some scientists believe that these asteroids came from the break-up of a large planet that used to orbit around the sun between Mars and Jupiter. Now, only the asteroids remain, circling the sun in its place.

JUPITER is the fifth planet from the sun. It is the largest planet in this solar system. It is almost 1,400 times the size of Earth! Since it is so much farther from the sun, Jupiter takes almost 12 Earth years to circle it. A sixth grader, 12 years old on Earth, would be only one Jupiter year old!

Instead of being solid, like the first four planets, Jupiter is made up of gases only. So are the next three planets beyond it. Temperatures in the clouds near the surface of Jupiter have been measured at lower than $-200°$F. The planet has a giant "red spot" caused by enormous hurricanes.

Jupiter has sixteen moons. The two largest, Callisto and Ganymede, are both larger than Mercury. Io and Europa, the next largest, are about the same size as our own Moon. Scientists have observed many active volcanos on Io.

SATURN, the sixth planet from the sun, like Jupiter, is also a gaseous planet. It is the 2nd largest planet in the solar system. Saturn takes almost 30 Earth years to circle around the sun. (If you know someone who is 30 years old, on Saturn, that person would have just celebrated his or her first birthday.) Like Jupiter, it is a giant planet, over 800 times as big as Earth. Temperatures on Saturn and its moons average $-185°$F. Winds just above the cloud tops have been measured at over 900 miles per hour.

Thousands of rings of ice and rock surround Saturn, giving it a very different appearance from those of the other planets. Saturn has 21 moons. The largest, Titan, is the size of the planet Pluto.

URANUS is the seventh planet from the sun. It also is a gaseous planet. Uranus revolves around the sun once every 84 Earth years. It would be a very long time between birthdays on Uranus! Uranus is the third largest planet, over 60 times the size of Earth.

Like Saturn, Uranus is encircled by narrow rings. They are less obvious than Saturn's rings, and harder to see from Earth. Uranus rotates differently than all the other planets. Instead of spinning like a top, the way the other eight planets do, Uranus rolls around on its side like a ball, as it circles the sun.

Uranus has five moons. The three largest are called Oberon, Titania and Ariel. The average temperature on Uranus and its moons is a very cold $-215°F$.

ASTRONOMY UPDATE:

> Astronomers now have identified 15 moons around Uranus. The additional 10 moons were discovered when astronomers analyzed data from the Voyager II mission. Of the 15 known moons, only five are large enough to be considered major moons.

PLUTO is now the eighth planet from the sun and will be until 1999. On the average, it is the planet furthest from the sun, but in 1979, its long, skinny orbit carried it in closer to the sun than is Neptune. From Pluto, the sun looks like a bright star.

Pluto is the smallest planet in our solar system and is not like any of the others. It is just a huge block of ice. The average temperature is only about $-230°F$. Pluto and its moon Charon take 248 years to complete one orbit of the sun.

Compared to the relative sizes of other planets and their moons, Pluto and Charon are similar in size. Some astronomers refer to Pluto and its moon as being almost a double planet. In reality, the diameter of Charon is about a third of Pluto's diameter.

NEPTUNE, usually counted as the eighth planet from the sun, is now the planet farthest from the sun, and counted as number nine. It is the fourth largest planet, about 64 times larger than Earth. It is almost a twin to Uranus; it too, is a gaseous planet without a solid surface. Neptune takes almost 165 Earth years to complete one trip (revolution) around the sun. If you lived on Neptune, you would never have a birthday!

Neptune has two frozen moons. The larger is Triton and the smaller is Nereid. Temperatures on these bodies, far from the sun, average $-200°F$.

WHAT NEXT?

Here are some activities to try after playing MICKEY'S SPACE ADVENTURE.

1. Activity: Weigh Out
   Skill: Weight ratios
   Materials: Bathroom scale, pencil, paper

   Mickey, a 100-pound mouse, changes weight with every planet he visits. Calculate your own weight on each of the planets Mickey visits. You can do this simply by dividing Mickey's weight on each planet by 100, then multiplying by your own weight. You can also use this same method to calculate the weight of a friend or pet. Here is the equation to use:

$$\frac{\text{Mickey's weight on Planet A}}{100} \times \text{Your weight on Earth} = \text{Your weight on Planet A}$$

2. Activity: How Old Would You Be . . .
   Skill: Planetary science, ratios, multiplication and division
   Materials: Pencil, paper

   From the section in this guide about the solar system, you know abut how long it takes each planet to make a full circle around the sun. That time period represents a year on that planet. Figure out your own age in years if you were living on each planet.

   To do this, multiply your age on Earth times the number of days in Earth's year (365) to get your age in Earth days. Then divide by the number of Earth days in the other planet's year. For instance, if you are 12½ years old and trying to figure your age in Mercury years, the equation would look like this:

$$\frac{12\frac{1}{2} \text{ years} \times 365 \text{ days/year}}{88 \text{ days/year}} = \text{Your Age on Mercury}$$

   To calculate faster, try using a calculator or even your computer. The answer, 51.85, would be the number of times that Mercury has circled the sun since you were born. Just think, you would be getting ready for your 52nd birthday.

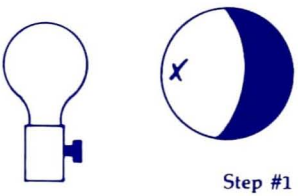
3. Activity: The Universe in Miniature
   Skill: Planetary science, size and distance comparisons
   Materials: Balls of different sizes, a yardstick

   Take a walk to the nearest football field or school track field (any large open space will do). Bring with you nine balls, each of which represents a planet. Mercury is a large marble. Venus and Earth are golf balls (remember, they are almost the same size). Mars is a jacks ball, Jupiter is a basketball. Saturn is a soccer ball (you can make your own rings if you like). Uranus and Neptune are softballs (these two planets are also nearly identical in size). Pluto is a small marble. The sun would be a ball 10 feet wide; you'll just have to imagine the sun!

   Now "build" a miniature solar system. At one end of the field, decide on the placement for your imaginary sun. Place Mercury about 1 foot away. Venus should be a little over 2 feet from the sun. Earth will be 1 yard away from the sun. Mars should be 1½ yards from the sun, and Jupiter 5 yards from the sun. Place Saturn 10 yards from the sun, Uranus 19 yards from the sun, Neptune 30 yards from the sun and Pluto 40 yards from the sun. These distances are based on the average distances between each planet and the sun.

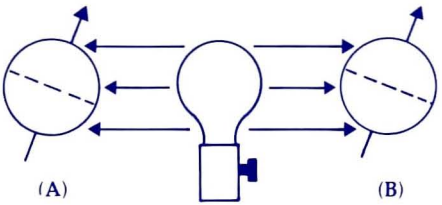
   Note: This imaginary universe is not an exact scaled-down replica of our solar system; it is somewhat compressed in order to fit on one field. In relation to the sizes of the "planets," an exact replica would have Mercury, the planet nearest the sun, 134 yards away from it, and Pluto would be nearly 8 miles away.

4. Activity: As the World Turns
   Skill: Understanding day and night
   Materials: Light bulb, ball



   You can make a model of night and day with just a light bulb and a ball. Use a light bulb in an otherwise dark room to represent the sun. Hold the ball, which represents Earth, near the light (Step #1). The side toward the light represents the day side of the planet. Pick a spot on the day side; you can imagine that this is your town represented on a globe. Then slowly rotate (turn) the ball until that spot is on the other side, away from the light (Step #2). It is night there now. Rotate the ball again, in the same direction, until the spot is on the day side, where it began. You have just demonstrated a 24-hour day.

5. Activity: The Reasons for Seasons
Skill: Understanding seasons
Materials: Skewer, orange, light bulb



You can use an orange, a skewer, and a light bulb to see how Earth's seasons are caused. Stick the skewer through the center of the orange where the stems are. It represents the Earth's axis, an imaginary line which passes from the North Pole, through Earth's center to the South Pole. Hold the orange up to the light bulb (which represents the sun).

(A) Tilt the North Pole slightly toward the "sun." This is how Earth looks when the northern hemisphere is experiencing summer and the southern hemisphere is experiencing winter. The north is warmer because the sun is shining more directly on it.
(B) Now walk in a circle halfway around the bulb, keeping the "North Pole" end of the skewer pointed ahead of you at the wall behind the bulb, not at the bulb. The northern hemisphere is now experiencing winter and the southern hemisphere is experiencing summer. See if you can figure out where the Earth would be in relation to the sun during spring and fall.

6. Activity: Junior Explorers
Skill: Mapping, direction finding
Materials: Pencil, paper, compass

Make a map of the route to a friend's house. Label all the streets and indicate some of the landmarks along the way. Be sure to mark the compass directions on your map. Now, using your map, give your friend directions to your house. Use compass directions. For example, tell your friend to "go south on Elm Street, then east on Main Street."

7. Activity: Invent Your Own Aliens
Skill: Creative thinking
Materials: Paper and pencils

As far as we know, there is intelligent life on only one planet in the solar system—Earth! But just for fun, MICKEY'S SPACE ADVENTURE depicts aliens living on some of the other planets. Where they live affects what they are like. What do you think that aliens living on Venus would be like? What about aliens living on Io, one of Jupiter's largest moons? Draw a picture of these alien creatures. Explain why they look as they do.

GLOSSARY OF TERMS

ALPHA CENTAURI—The stellar system nearest our own.

ANCIENT—Very old.

ASTEROIDS—Very small planets, with diameters ranging from a fraction of a mile to nearly 500 miles. Although about 2000 circle the sun in an orbit between Mars and Jupiter, some have other orbits.

ATMOSPHERE—A layer of gases which surround a planet. When you look up at the sky, you are looking at the bottom layer of Earth's atmosphere.

AXIS—An imaginary line that runs through the center of a planet, from pole to pole. Each planet rotates around this pole as it circles around the sun.

BARREN—Without plant life.

BASIN—A large depression in the land, or in an ocean floor.

BLEAK—Barren, and often windswept.

CARBON DIOXIDE—A heavy, colorless gas that is one of the main ingredients of our atmosphere on Earth.

CHASM—A long, narrow canyon.

CIVILIZATION—The culture of a particular time or place.

CRUST—The outside surface layer of a planet.

DAY—The length of time it takes for a planet to rotate once on its axis. A day on Earth is 24 hours long.

EASTWARD—Toward the East.

ERUPT—To force out or suddenly release stored-up energy (such as volcanic lava or steam).

EXTENSIVE—Wide or large.

FLAMMABLE—Easily set on fire.

GAS—An almost weightless, sometimes invisible substance (such as gases in our air).

GASEOUS—Describes the planets Jupiter, Saturn, Uranus and Neptune, which are made mostly of compressed gases. The gaseous planets actually make some of their own heat. You cannot land on a gaseous planet since it has no surface.

GLACIER—A large body of ice moving slowly down a slope or valley or spreading outward on a land surface.

GORGE—A narrow, steep-walled canyon.

GRAVITY—The attraction of a body (sun, planet, moon) to other bodies that holds them near each other. The sun has a gravitational pull on the planets to keep them circling around it, just as a planet has a gravitational pull on its moon(s). Gravity holds you to the ground, and causes you to have weight. This is why you weigh more, or less, on a planet with different gravity than Earth.

HELIUM—A lighter-than-air, colorless, non-flammable gas sometimes used to inflate balloons.

HYDROGEN—A lighter-than-air, colorless, odorless gas that is highly flammable.

ICE (WATER ICE)—A hard, cold substance formed from water when its temperature drops below 32°F (0°C).

IMBEDDED—Enclosed or surrounded, almost a part of something.

INFLATE—To enlarge, usually by blowing in air or gas.

LAVA—Hot liquid rock that flows from a volcano when it erupts—when it cools down it becomes solid.

METHANE—A colorless, odorless, flammable gas.

METHANE ICE—A hard, cold substance formed from methane when its temperature drops below −297°F (−183°C).

MINERAL—A naturally occurring substance such as stone, coal, salt, petroleum or sulphur.

MOLTEN—Melted.

ORBIT—The imaginary path followed by a body (moon, planet) when it circles around another body (planet, sun).

OXYGEN—A colorless, odorless gas that forms about 21% of our own atmosphere.

PICTOGRAPHS—Ancient drawings or paintings on a rock wall.

PLANET—A large body that circles around a star.

PRECISE—Exact.

REVOLVE—The circling of a body (planet, moon) around another body (sun, planet).

ROTATE—The spinning motion of a planet or moon as it turns on its axis.

RUGGED—Having a rough or uneven surface.

SOLAR SYSTEM—A group of planets, moons, asteroids, comets, and the stars they revolve around.

SOLID—Having a hard surface. The planets Mercury, Venus, Earth, and Mars, have solid or hard surfaces, and are generally rocky in composition. Everything in the universe must be either solid, liquid, or gaseous.

STAR—A gaseous body that gives off light and heat.

STELLAR—Relating to a single star, or the stars in general.

SULPHUR—An element that exists in both solid and gaseous forms, that is characterized by its yellow color.

SUN—The star around which the nine planets in our solar system revolve.

SURFACE—The top-most layer of a body.

SURROUNDED—Enclosed on all sides.

THERMOMETER—An instrument for finding the temperature of something.

THROTTLE—The lever which controls the fuel to an engine.

MOON—A body of matter that circles around a planet.

NITROGEN—A colorless, odorless gas that makes up 78% of our own atmosphere.

NUTRITIOUS—Nourishing (good for you).

VIBRATION—A regular quivering or trembling motion that often accompanies the operation of an engine.

VOLCANO—A hill or mountain above a crack or hole in a planet's crust, where steam, melted rock, and lava sometimes erupt.

YEAR—The amount of time it takes for a planet to make a full orbit around the sun. A year on Earth is 365 days long.

APPENDIX
STARTING OS-9 FROM BASIC

If you do not have a Color Computer with BASIC version 1.1 or later or if you do not have the OS-9 System, you can type in the following program and use it to start Mickey's Space Adventure.

Make sure you have a formatted diskette in drive ∅ to save the following program from Disk Extended BASIC.

Enter the following program from Disk Extended BASIC.

```
10  REM ----------------
20  REM  BOOT OS-9 FROM BASIC
30  REM ----------------
40  FOR I=Ø TO 7Ø
50  READ A$
60  POKE &H5ØØØ+I,VAL ("&H" + A$)
70  NEXT I
80  CLS:PRINT "INSERT THE MICKEY'S"
85  PRINT "SPACE ADVENTURE DISKETTE, SIDE 1"
90  PRINT "INTO DRIVE Ø AND PRESS A KEY"
100 A$=INKEY$:IF A$= ""THEN 1ØØ
110  EXEC &H5ØØØ
120  DATA 86,22,8E,26,ØØ,8D,ØD
130  DATA FC,26,ØØ,1Ø,83,4F,53
140  DATA 26,Ø3,7E,26,Ø2,39,34
150  DATA 2Ø,1Ø,BE,CØ,Ø6,A7,22
160  DATA 86,Ø2,A7,A4,6F,21,6F
170  DATA 23,6C,23,AF,24,1Ø,BE
180  DATA CØ,Ø6,A6,23,81,13,27
190  DATA 12,AD,9F,CØ,Ø4,4D,27
200  DATA Ø6,6C,23,6C,24,2Ø,E9
210  DATA 7F,FF,4Ø,35,AØ,4F,2Ø
220  DATA F8
```

Type LIST ⟨Enter⟩
When "OK" appears on the screen, type
SAVE "START" ⟨Enter⟩

Keep this copy of the program available so you won't have to type the entire program each time you want to play Mickey's Space Adventure.

To use this program, type
LOAD "START" ⟨Enter⟩

When the "OK" prompt appears, remove the disk from the drive and insert the Mickey's Space Adventure disk, side 1.

Next, type
RUN ⟨Enter⟩

Wait until the disk drive stops reading from the disk and you see a message at the top of the screen followed by the OS9: prompt. Then type
MICKEY ⟨Enter⟩

You are now ready to start the game.

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