

Taking it on the Road

Fun for Homeschoolers Away from Home

By Lynda Coats

What This is All About

So many homeschoolers spend so much time on the road now that many of us don't really seem to be schooling at home any more. We have even coined such phrases as 'car schooling' or 'van schooling' to describe what we do. However, this often differs from traditional homeschooling only in location. It usually consists of carting along all the books and workbooks and having children complete a traditional day's assignment between errands and/or sightseeing trips, often leading to frustration for both parents and children when needed supplies are left behind or run out, or children become bored with the monotony.

I submit that there is a better way to take advantage of our time on the road, whether we are traveling across the country to visit grandparents, heading to the beach or the mountains for a family vacation, or just running errands around town. The activities in this booklet are designed to make good use of our travel time while helping everyone have a good time as well. The activities in here will be a welcome change from routine as they will **ONLY** be used in the car or other vehicle or while away from home. Some activities are specifically for use when actually taking a trip, but many can also be used any time you are in the car with your children, even for a few minutes.

It is unlikely that more than one of these activities will relate to any certain lesson in any particular curriculum at any given time. However, children can still learn valuable thinking skills, exercise logic, and review information learned from other lessons, all of which are very important for future learning. Many of these can be used over and over again with different results, based on location or other factors.

In this day of electronic learning and entertainment, these types of devices sometimes seem to take the place of family interaction, which can make a trip together so much more meaningful. For this reason, we have tried to provide activities in which those devices are not required and to feature only those that can be enjoyed together. We do list some educational options using electronic media for those who really feel the need for such things.

In keeping with ease of use, most activities in this book require no supplies except paper and a writing implement, things most of us carry in our cars or purses. This makes the activities easy to use on a moment's notice, either for a sudden trip or to relieve boredom on a long trip when other planned activities become tiresome. It also prevents loss of supplies making an activity impossible to do. Activities that do have special requirements are noted by * with the items needed listed in bold type in the description. When the * is in parentheses, the extra items are optional; the activity can be done without them. You may also wish to supply each child with a notepad and or clipboard on which to write as called for in activities of for personal doodling or note taking.

This guide book contains a wide range of activities for all ages and levels as well as many that can be pursued by the whole family together. For maximum convenience, activities are listed here by subject area, but ages or grade levels are also indicated where that is an issue. Ages are approximate and most activities will work for some older or younger children. Many are ideal for all ages working together and are designated as such.

All users are free to add their own twists to these activities and use them as they see fit. Families may even share favorite activities with friends as long as it is done orally by teaching them the game, not copying the booklet. This booklet is copyrighted and should not be shared with others, in print or electronic form. To do so is a violation of U. S. and international.

Activities are listed by subject areas, but many activities actually overlap into more than one area. Don't limit yourself to only those listed. Use your imaginations and those of your children to find new ways to have fun and learn as you go.

Though specifically designed for families traveling by car or running errands around town, some of these activities can easily be altered for use on airplanes, trains, or other public transportation. We have also included a small section in the back giving some ideas that would be specific to those types of travel. You will want to be sure and take advantage of any others offered by the carrier on which you are traveling.

Bible or Character Training

1. **Round Robin Verses *** - Someone may need a **Bible or a set of Bible verse cards**, preferably those the children have already been memorizing. One family member can start the verse by stating the verse reference and giving the first word. Each member in turn will name the next word until the verse is finished. You can determine, based on the age of the children, how strictly correct the wording must be and how much help a child may receive. If your children like competition, this could be done as an elimination with anyone who misses knocked out of the rest of the round or until only one person remains. Just bear in mind that young children may get very frustrated, if they are knocked out for long periods of time, and may lose interest in the game.

2. **Who am I?** - Give clues about Bible characters and let children try to identify them. If the children are fairly close in age and Bible knowledge, they may be able to take turns guessing and giving clues. Otherwise, pick appropriate questions for each child in turn. Be sure to have some method planned in advance for determining when a clue is incorrect and how to deal with that situation.

3. **Bible Twenty Questions** - This is similar to the game above, but players must ask questions to get clues. All questions should be answered with 'yes' or 'no' only, and all players should take turns asking. When a player thinks (s)he knows the answer, (s)he must ask it in the form of a question: "Is it ___?" A wrong guess puts the player out of the game for the rest of that round only. The one who gets the answer gets to choose the next person.

4. **I Challenge You** - This game works best where most members of the family know the books of the Bible in order fairly well as the idea is to take turns reciting the books in order. To begin this activity, someone says, "I challenge you" and calls out a book of the Bible. The next person calls the next book, and so forth until all of done or all but one person has missed one. When first getting used to the game, it is best to always begin with either Genesis or Matthew to do each or both testaments in order. With older children who really know their Bible, you might try to throw them off by starting somewhere else like "Ezra" or "Romans" and see if they can pick up from there, going all the way to the end and starting over until they reach the named book.

5. **Memory Check *** - Travel time may be a good time to drill children on their memory verses, by having them recite them to you or another adult. If you do know the verses well enough to check them while you drive, another adult or an older child may do it, equipped with a **copy of the verses** to check for correctness.
6. **Music for the Heart *** - If your family enjoys music, this is a good time to memorize and/or sing songs and choruses based on Scripture. Use **CDs or tapes** to prompt and/or accompany them or sing purely from memory. Either way, you are helping your little ones to hide God's word in their hearts and learn to praise Him in all settings. Let them take turns choosing songs to sing if possible.
7. **What If?** - This is not exactly a Bible activity, but it will help your children think through the proper response to various situations they may face in their lives. Any time there is a lull in activity or conversation, ask a question requiring a character or value judgment answer (such as: What would you do if your best friend ran away? How would treat a blind who child moved in next door? What would you do if you found a quarter at your friend's house?) Choose situations appropriate to the ages of the children, and be prepared to discuss their answers. Never just say that an answer is right or wrong. Explain why from a biblical perspective. (all ages)
8. **Bible Stories to Go *** - There are many sources for **recorded Bible stories** or even word-for-word readings of the Bible. Stocking up on these before a trip may be a great way to help your children hide God's word in their hearts even while traveling with the family. (all)
9. **Pray Along the Way** - Contrary to what many believe, prayer does not have to be done with heads bowed and eyes closed. The Bible contains many verses that admonish us to pray at all times and in all situations. Why not use travel time as prayer time? You can all pray each day for the concerns of your own lives, the trip itself, your regular prayer list, or other needs that may arise.
10. **Notice the Needs of Others** - In addition to the regular items on your prayer list, teach your children to pray as a response to the needs of others you notice along the way, such as the occupants of a stalled car, accident victims, or hitchhikers. This will teach your children to think of prayer as the natural response to needs. (all)

History, Geography, and Social Studies

1. **Welcome Center Scavenger Hunt** (*) - Stop at the welcome center in each state through which you travel. Not only do they offer maps and brochures about things to see and do in their state; these places also introduce you and your family to some of the unique features of the state. To make the most of these stops, **prepare a list in advance of things to learn about each state.** You might want a list for each child, or children could work together or in teams. You could include things they have to bring back to the car (such as a picture of the state's flag) things they might learn through reading signs or watching videos, etc. (size of the state in area, largest city, distance to largest city or capital), and something they would only be able to learn by asking someone at the center. This will force the children to interact with others in a positive way. (all ages in teams or working together as a group)
2. **Travel Brochures** * - While at the welcome center, be sure to collect **travel brochures and flyers** about sights to see and things to do in the areas you will be visiting. Maybe you can fit some of these into your trip. If you are only traveling through a state, you may still want some of their info so all of you can learn about it on the trip. You will also want a road map of each state. (all readers)
3. **Get a "Guided Tour"** * - Triptik™ and other tour guides are available through AAA and other auto clubs or travel agencies. Order from your local travel club, download from the Internet, or write ahead for them. Once you have these tools, they can be used in several ways by your children. Many families enjoy just reading through them or following along in the book as they reach each new area in their travels. Other activities are available in this section. (all ages, reading together)
4. **I Know Where That Is** * - Using **travel guides or similar materials**, list towns, parks, state lines, welcome centers, and other sites through or near which you expect to travel on each leg of your trip. Place out sheets as you start each day's travel. (For younger children, you may prefer to read the items individually as you begin to near them to allow the children to focus on each one more easily). Have children keep their eyes peeled for the site or a directional sign leading to it and to call out "I know where that is, when they locate it. Give one point to the child who finds each item first and keep a running total of points. (all readers)

5. **Geography Scrapbook *** - Your children might enjoy making a scrapbook of things they collect from the various places you go on your travels (**photographs, brochures, postcards**, etc.). It would probably be best to put the scrapbook together at your destination, during overnight stops along the way, or when you return home. Use the trip to gather the materials and plan how to display them. This can take whatever form the children like and will give them many hours of fun, now as they plan, when they make it, and for many years as they look back to remember the trip. Pictures cut from tour guides or brochures may work well in these, but don't neglect photos of your own trip. On our cross-country travels (we have hit every state except Hawaii), we always stopped and took a picture of the sign on the state line welcoming people to the state. These head the pages of our scrapbook. Supplies you may need during the collection stage include **scissors, a storage envelope to keep your finds, a camera and film** (if camera requires it), and a **scrapbook or looseleaf binder with page protectors** to contain your project. (all ages working together, about 8 and up independently)

6. **Get a Taste of Local Culture** - While this is not exactly history or geography, it would fall under the general category of *social studies* and serve a valuable purpose in any child's education. Wherever you are traveling, take a break from McDonald's and KFC to try something from the local area. This is obvious when visiting other countries, but there are many regional dishes in parts of the U. S. (and probably other countries) as well. You might eat lobster in Maine, beans in Boston, barbecue in Kansas City, Cajun dishes in Louisiana, buffalo in the Western states, Mexican (or Tex-Mex) in Texas or New Mexico, shrimp and flounder on the Gulf Coast, and grits anywhere in the Southeast. Try it; you may like it. (all)

7. **Celebrate with the Locals** - In addition to re-enactments, many areas hold festivals of all kinds, celebrating everything from local produce to ethnic heritage, with many others in between. You can celebrate at such events honoring peaches or rattlesnakes in Alabama, watermelon or peaches in Georgia, sausage in the German communities of Texas, crawfish in Louisiana, and many other things in various areas. Check around and see what you can find. Try to participate in anything like this that is available; you can learn a great deal about the area and its people and have a great time as well. (everyone)

8. **License Plate Geography *** - Provide each child or team with a **small U. S. map**. Mark each state on the map when the family finds a car tag from that state. To expand this for older children have them, track the direction and distance from each state to the place where that state's tag was found. This is even fun to do in your trips around town as you can keep a running list of tags found in your community. Keep the list from each errand-running trip and add to it until you have found all of them. This could also be done in Canada and any country where car tags are designated by region in some way. (all ages if paired by age)

9. **Car Tag Bingo *** - The game mentioned above can be varied for those who prefer competition by making **'bingo' cards with state names** on them in advance of the trip. Be sure that each card is different and that each one contains the names of the states you expect to pass through on your trip as well as some others that will be more challenging. Make you state the 'free' space on each card. When you leave home, give each child a card, and a different color **highlighter**. Children are to color in the space for each tag they find on the trip and see who gets 'bingo' first. (age 8 or above)

10. **Trace the Trip *** - Give each child (or have them share if they work better together) a **U. S. atlas or a notebook containing road maps** (you may print these from the Internet) for the states (or areas) through which you plan to travel. Teach the children how to note each town through which you pass, each place you stay, etc. and to track the distance you travel each day.(Extension of this can be found in the Arithmetic section) (about 7 and up)

11. **Put Yourself in Their Shoes** - If you are traveling in any part of the country (whatever country) that was once considered the frontier and traveled by wagon, try to imagine what it looked like when the first settlers came there. Notice especially the terrain and the climate. Discuss how different this trip would have been without the highways, rest stops, distance and direction markers, and modern conveniences we have today. How would the settlers have known where they were? What would they have done for food? Was there anything scary or inhospitable about the area? Do you think you would have continued on your way if you had to face this? (everyone together)

12. **Roadside History** - If time allows, stop and check out all roadside landmarks you pass on your trip. Try to find out all you can about those places from any available information at local or state tourist centers. You may also want to make notes of these landmarks and help the children investigate them further when you arrive home or at your destination. Don't neglect those stops that offer nothing more than a scenic view of a new area. Some of these are breathtaking and may rank high on your list of most memorable moments on the trip. (everyone together)

13. **Whose Highway is It? *** - Whenever you pass or find yourself driving on a highway named for someone, try to find out if anyone in the car knows who that person is. You might be able to find the information in some of the **tourist information** you have been collecting. If you cannot find the answer, write it down to research when you get home; then remember to do it. (everyone together)

14. **I Know Who That Is** - As you travel through each area, watch for place names you or the children recognize and see who can remember who the people were (or are). Try to determine and explain (if not obvious) why that particular area has something named for that person. (It is not always as easy as it sounds.) If you are not sure of the answers, have someone keep a running list and check them when you get home. (everyone working together)

15. **Book Them All *** - In choosing books for your read aloud times or audio books for the car, include **biographies or historical fiction** related to the area where you are traveling or people who played a part in its local history. Use these as suggested in the *Language Arts* section of this book. (all ages together)

16. **Who am I?** - Give clues about characters from history and let children try to identify them, by guessing in turn. (This is the same game used in the Bible section only using different people.) variation of the You may wish to add additional clues each time a person makes the rounds without being guessed. The younger the child, the more clues (s)he may need. If the children are fairly close in age and knowledge, they may be able to take turns guessing and giving clues. Otherwise, pick appropriate questions for each child in turn. Be sure to have some method planned in advance for determining when a clue is incorrect and how to deal with that situation. (all ages with appropriate clues)

17. **History Twenty Questions** - This is similar to the game above, but players must ask questions to get clues. (This plays just like All questions should be answered with 'yes' or 'no' only, and all players should take turns asking. When a player thinks (s)he knows the answer, (s)he must ask it in the form of a question: "Is it ____?" A wrong guess puts the player out of the game for the rest of that round only. The one who gets the answer gets to choose the next person. You may want to limit a particular game to a certain time period or country, (all ages with appropriate people chosen)

18. **Check It Out** - If time permits, take advantage of sightseeing opportunities on your route and take impromptu field trips to those that interest you and your family. You can learn a great deal from both historical and scientific sites. (everyone together)

19. **Step Back in Time** - Be sure to take advantage of any historical re-enactments that may be going on at or near your destination or stopover. You can find information about many of these on the Internet in advance or through reading local papers or tourist brochures on the trip. Some historic tourist sites have such programs as a regular part of their offerings. Other localities offer special monthly or annual performances. Try to attend one or more of these if possible and participate as fully as you are allowed. Your children can learn so much more by immersing themselves in the time period than just reading or hearing about it.

Language Arts

Alphabet and Phonics

1. **Billboard Alphabet** - Have children watch for and call out each letter of the alphabet (in order) as they see it written on a sign along the roadway. You can either have someone keep score, giving one point to the person who finds each letter first, or have the children work together to see how many times that can go through the whole alphabet in a given time period or distance. (all who know letters and younger children with older ones to help them)
2. **Road Side Phonics** - All young children who know the sounds of letters can play this game. This is played like the game above, except that children look for pictures or objects that start with each letter in order, rather than finding the actual printed letters. You may want to keep objects inside the car such as quarters, zippers and keys visible for those letters that may be hard to find. Don't reveal those choices, though, until the children have tried on their own for a while. You may need to teach new names for some objects (locomotive for train, wharf rather than dock, etc.) (ages 5 and up)
3. **License Plate Alphabet** - Have children watch for the letters of the alphabet in order from car tags you pass or see at your stops. The letters can be from the state names or mottos, or the actual tag ID number. You may want to restrict your search to words from only one specific source or count any of them, depending on the ages and levels of your children. Everyone could work together on this or you may give each child a **checklist** to find the letters on their own. Just make sure each child lets you know when (s)he finds each letter. (all who know letters)
4. **I'm Going on a Trip** - This is a simple word play game that can help even young children learn phonics and improve vocabulary. Older ones can enjoy trying to think of unusual word to use. It also reviews alphabetical order and improves short term memory. One person begins this game by say "I'm going on a trip, and I am taking.." then naming something that starts with the letter "a". Each person in turn will make the same statement and add an item stating with the next letter. Small children will only be expected to name their own letter in their turns, but others should be required to repeat everything for the beginning. (all ages with adjustments)

Reading Skills and Good Books

5. **Daily Read-Aloud Time** * - Families should read together often at home, but it can have a special place on a car trip when traveling a great distance over several days. Since the driver obviously cannot read and drive at the same time, this is a good time for the children to read to each other and to you, or the reading may be done at night in the motel or campground. Check gift shops and welcome centers along the route for **books about the areas you are seeing** or order some in advance without letting the children know you have them until reading time. (everyone together)

6. **Listening to Good Books** * - If reading aloud is not an option for you or your family wants more than the available number of readers can offer, you might invest in a few **audio books**. These cassettes or CDs offer word-for-word reading of a wide variety of books, including lots of great literature. Listening to them together can serve as a springboard to conversations on related topics and give your family valuable shared experiences. If you are in an area where Cracker Barrel Country Store has outlets, you can get unlimited audio book useage for one purchase. Buy an audio book at one location and trade it in for a new one at every subsequent stop. (everyone together)

7. **Tour Guide of the Day** * - Let the independent readers in your group take turns exercising their reading skills while sharing upcoming events with the rest of the family. Using the appropriate **guidebooks or trip brochures** for that day's leg of the trip, designate a child (alternate equally) for each day to read about each upcoming area or sight. You can have the entire day's plans read in advance, or let the 'tour guide' read about each sight as you approach it. Older, more mature children should be encouraged to pre-read their assigned section in advance so they can choose the appropriate part of each page to read aloud or present it in their own words. (independent readers of any age)

8. **Read Up on It** - As you stop to check out roadside markers or places of interest (see *History and Geography* section), let children read the signs and any brochures or pamphlets given out at the site, taking turns reading aloud and asking questions about the site as appropriate. (independent readers)

9. **Share your Ideas** - If everyone is willing to do so, let the children read each other's journals (see below) for the previous day to see the different thoughts each person had on the same event. Just be sure no one reads another journal until their own is done, as we want each journal to be its author's original thoughts.

Composition and Writing Mechanics

10. **Writing for Information** - Before you start on an interstate trip, have children write letters (yes, real letters, even in this day of e-mail and downloading) to tourist bureaus in the states, provinces, major cities or resort areas you will be visiting to ask for travel brochures, booklets, or other information available on the area. This will provide a rare venue for teaching the children the correct format for writing formal business letters, and they will be thrilled to get mail of their very own. (ages seven and up)
11. **Journey Journal *** - Provide each child who is able to write with a **notebook or writing tablet** in which to keep a written record of your travels, recording at least a few sentences (determine the amount of writing based on ability) about where you went, what you did, and their thoughts about it. You may wish to read aloud or have the children read from each journal every evening to relive and share the experiences of the day. Little ones who wish to participate may dictate their sentences to parents or older siblings who will write them down. The child may then copy the written words if that is appropriate to his age and ability.(age 6 and up)
12. **Postcards Home *** - You can strengthen writing skills and preserve a history of the trip by using picture **postcards** from major points of interest on your trip. Each child can write a simple message on one or more of these on each leg of the trip and mail to friend or relatives. You may want to some to your home address. When you return, you will have a ready-made trip journal to share with friends. (6 and up)

Spelling and Vocabulary Development

13. **What Exactly Does That Mean?** - Challenge older children to keep a list of new words they see on signs, hear, read about, or otherwise encounter on the trip. You can share these lists at the end of each day and try to learn the meanings of the words on them. Save the list of any words that none of you know to research later. (10 and up)

14. **Make Something of It** - Children can work together, in teams or individually in this activity, which can be done anywhere but will relate well on a car trip. Provide children with a starting word or phrase having at least ten letters; you might try using names of states, cities or areas through which you will be traveling while they are playing. Give a set amount of time for the children to see how many words they can find using the letters inside their starter word or phrase. Letter need not be used in order, but all letters in new words must be found in the original and none may be used in any word more often than they appear in the starter. (8-9 and up)

Creative Thinking and Writing

15. **State Anagrams** - Exercise your child's phonics skills, alphabet recognition, spelling, and creativity with this activity. Write the name of a state or city vertically down the side of a page or notebook paper. Then, as you tour or talk about the state, have each child come up with a word or item related to the state that begins with the each letter in the state's name. Children can work together or each can make his/her own. (8 and up)

As an example, here is one way to do my home state:

A = Aerospace

L = Lakes

A = Alligators

B = Beaches

A = Azaleas

M= Montgomery

A = Aviation museum

16. **State Poetry** - Take the above activity a step further by making up poetry, with or without anagrams, to reflect the history, characteristics, flags, people, and/or scenery of the state. You can use limericks, Haiku, or any other type of poems. (age 8 and up)
17. **What's Going on Here?** - To improve observation and logical thinking skills, choose one vehicle traveling along with you and ask the children where they think the people in it are going and/or what they plan to do when they get there. You will want to begin with something simple, such as a car with a canoe on top and sleeping bags rolled up in the back seat. Let everyone give an opinion and discuss them. There are no right or wrong answers, only those that are logical or illogical. As skills develop, use increasingly ambiguous scenarios that lend themselves to multiple interpretations. (all ages at their own levels)

18. **Heads in the Clouds** - This fun activity may not seem educational, but it is a great way to encourage the kind of creative thinking that is necessary for writing fiction of any kind and very helpful in everyday problem-solving. The nice thing is that it can be done anywhere and by anyone. All you need is the clouds in the sky. Ask the children to look at the clouds and tell you what they see. Your literal thinkers (which most children are after the age of six if not taught to use their imaginations) will try to describe the actual appearance of the clouds, tell about water vapor, etc. It may be left up to you to find a fluffy lamb, large cacti, or an elephant in the cloud shapes around you. Once children get the hang of it, they will begin to “see” clouds in a variety of creative ways. These can become story starters as the family works together to make up one or more stories about the things the children ‘saw’ Someone may want to write down or tape these stories, but it is not necessary. The value is in the creating, not in saving the creations. There will be new clouds with new stories to tell tomorrow. One of the best things about this is that it can be repeated as often as anyone wishes and is a great boredom breaker. (everyone)

Arithmetic and Higher Math

1. **Are We There Yet?** - This activity puts a new twist on the old question. Arm your children with information on the distance between various places you will be going. (Or have them find those on the map for themselves as per activity #9 under History and Geography). Report to them periodically how far you have traveled and your rate of speed. Let them keep records of the trip progress and report (predict) when you will be there. Be sure to keep them informed whenever you driving speed changes for whatever reason. (8 and up)
2. **How Far is It?** - Begin each day by reading the car's odometer. Explain what that measures if your children do not already know. Write down the odometer reading and the time of day. When you reach your destination (or each stop along the way), check time and mileage again and have the child compute your average driving speed. Older children may also tally the ratio of your average speed to the average speed limits, bearing in mind that many other factors can affect your actual mileage. (10 and up)
3. **All in a Day's Drive** - Using the figures collected in the two previous activities, have children track the total miles traveled each day and find the average miles per day when you arrive at your destination and when you return home. (8 and up)
4. **What Would the Tax Man Say?** - Use this opportunity to hone your children's math skills and teach about taxes and tax deductions. Begin by explaining that if this trip had been to conduct business or transport someone for necessary medical care, you could have taken part of the cost of it off your income that is to be taxed. When the children have totaled the miles driven to your location, give them the current per mile figure used by IRS to determine mileage deduction and let them figure out what yours would be for this trip. Be sure they multiply by two to pay for the return trip as well. (12 and up)
5. **More or Less** - You can also use a trip to teach your children about sales taxes. Each time you make a purchase (other than gasoline) on the road, write down the total purchase and tax paid. Compute the percentage of tax paid on purchases made in each area and compare the rates of the different areas. (12 up)

6. **Money at the Pump** - You can do this activity on each day of a long trip or during a period of time for short trips around town. Start with a full fuel tank. Read the odometer and write down the mileage. Each time you fill the tank, check the odometer, the number of gallons purchased, and the amount paid. Have children perform necessary math operations to find average miles driven per gallon of fuel, cost per gallon and cost per mile. Keep this record for the entire trip (or for several weeks) and see how it fluctuates. (10 and up)

7. **Miles to Metrics** - This will be of special interest if you are traveling between the U. S. and Canada, but can be fun even if you are not. Start by discussing (or reviewing) the relative lengths of kilometers and miles. Then have the children compute distance markers they see on the road from miles to kilometers or vice versa. They can do the same with speed limits and any other measures of distance. (10 and up)

8. **Computing Your Cargo (*)** - You may not want to do this when traveling with someone you know is very sensitive about his/her weight as the weight of each person must be figured into the final answer. To do this, you would combine everyone's weight, the weight of all your luggage and other cargo and find the total weight you are carrying. If you do not know people's weights, use driver license weights for adults and guesstimate for the children. You would need some type of **scale** to weigh the luggage, but that could easily be done at home in advance. Then you would divide that by the number of people in the car to come up with an "imaginary" total cargo weight per person as if all weight was evenly divided. (10 up)

Science

1. **What Grows There? (*)** - As you drive and when you stop for any reason, keep an eye out for unusual plants that may not grow near your home. If you have a **plant encyclopedia or field guide** (they have separate ones for trees, wild flowers, and shrubs) someone can look them up on the spot. If not, take a picture of each new plant and investigate them when you get home (or back to your laptop). Do not pick or handle any unfamiliar plants, as many are poison or highly allergenic. It is also against state and local laws to pick certain types of wild flowers. Do take lots of pictures to add to your scrapbooks or journals. (all ages)
2. **Birds of a Feather *** - Bring along a **field guide to birds** of North America (if you are traveling there) or one for the particular region in which you will be. Keep a sharp eye out for feathered friends and mark each one in the guide as you find them. **Binoculars** and/or a **camera with a zoom lens** will make this easier. One of the older children can then read all about each bird. Take pictures of any that are close enough (everyone together)
3. **Running Wild (*)** - Use a **field guide for wildlife** and watch for any with which you are not familiar. Try to take pictures of them, especially if you have a telephoto lens. Do not try to catch or pet wild animals as even babies can sometimes be dangerous. Look for information on local wildlife in the various tourist materials given out at welcome centers, but don't neglect to watch for the unexpected just sitting or roaming along the roadway. You may even stop for a closer look if time allows, but be careful not to get too close or spook the animals. We have encountered several type of deer, big horn sheep, rabbits, raccoons, turtles, ground hogs, armadillos (yes, you can see live ones on the roadway before they become road kill.), elk, bear, and even a coyote and a fox or two. Happy hunting! Keep that **camera** ready! (everyone together)
4. **Preserve the Wildlife** - If you want to pursue the investigation of local animals further, plan a drive through one of the many state or national wildlife preserves that dot the landscape of the U. S. and most other countries. Stop at the visitor center and take in any videos or other interpretive displays that explain what is available in the park. Talk with park personnel about what to expect and how to best share it with your children. (everyone together)

5. **Venture Off** - If time and your location allows, take the children on one or more hikes into woodland, desert or other natural areas not seen from the roadway. Many parks and wildlife preserves offer these with or without a guide, but you can do your own if you prefer. Be sure to stay off private property, check the area for safety and be considerate of others who may come behind you. Keep your camera handy and expect the unexpected in plant, animal and geological discoveries. If everyone moves quietly and slowly, you may see some spectacular wildlife. (all ages w/adults)

6. **It's in the Stars** - If you are camping or stopping at rest stops after dark, take time to look at the night sky. If you travel over great distances in a short period of time (only a few days) note and discuss the difference in the night sky from each different location. Choose one specific constellation or star (not the North Star as it is constant) and look for it at the same time every night to see where it is in relation to the horizon. (everyone together)

7. **Climate Control (*)** - Note and discuss differences in temperature you notice on your trip. Talk about how the climate in each place you visit is similar to and different from that in your local area and between different areas you have visited. Be aware, as well, of weather differences within the same area brought on by such factors as humidity and altitude. Use your own knowledge, the **Internet or reference books** to explain the differences. (everyone)

8. **Higher and Lower (*)**- If you are traveling in a mountainous area, be alert to notice and point out the extremes of weather variations that may occur there, such as, going from 90°F heat in the valley to snow on the ground as you ascend a mountain, standing in pouring rain at about 80°F in Colorado Springs watching it snow atop Pikes Peak, or going from 80+°F in the afternoon to the low 40's at night in the same location. Discuss reasons for this. If you are not sure about this yourself, you may want to study it before the trip or bring along research materials to explain it. If your car does not have an outdoor temperature monitor, you may wish to bring an **indoor-outdoor thermometer** along but that is optional. You will probably be stopping often enough for the children to feel the heat differential. (everyone)

9. **What Time is It Really?** - As you travel through (and stay overnight in) different time zones, you may notice some rather extreme differences in the times of sunrise and sunset, even within the same time zone. (This is especially noticeable in the Central Time Zone of North America as it covers such a large area.) Take this chance to teach your children the purpose of time zones and how they were determined, as well as discussing the phenomenon that causes it to be nearly dark at 8:00 in Alabama when the sun is nowhere near setting at the other side of the time zone in Texas. If you do not know the explanation for this, research it for yourself before the trip, so you can talk about it knowledgably when the children notice it. (everyone)

10. **The Late Night Sun** - If you are traveling considerably further north (or south if in the Southern hemisphere), you will notice that the times of sunrise and sunset will be very different, even without the time zone differential mentioned above. Across the northern (or southern) tier, there is a great deal more daylight (longer days) at some times of year and a great deal less at other times. This is so extreme in the far, far north (or south) that the sun is barely visible in winter days and hardly goes down in summer. Research (in advance if possible) to discover why this happens, and discuss it when the children notice it. (everyone)

11. **Take a Detour** - Every part of the world has geological and topographical features that make it somewhat unique --- swamps, mountains, flat plains, craters, active or inactive volcanoes, canyons, and lots more. Take advantage of the opportunity to explore (from the car or on a personal tour) as many of these as you come across on your journeys. Be sure not to miss the big ones, such as the Grand Canyon in Arizona, geysers in Wyoming, The Great Lakes, glaciers in Banff National Park, The Great Barrier Reef in Australia, the Alps in Europe, the Andes in South America or the Rockies in the U. S. or Canada; even if you have to detour from your proposed route. These are well worth seeing, but don't neglect the more mundane. Check out anything that makes the terrain through which you are traveling different from the one where you live, even if you have to alter your course for a few miles. This can be great science and loads of fun and will produce lasting memories for the whole family. (everyone)

12. **How Do They Make That?** - If your travels allow, plan to take in an industrial tour or two at interesting plants and factories along the way. Don't waste your time on dairies, bottling plants, or similar things that you can tour in almost any community; go for the unusual that can only be seen in certain areas. Some places to try include sugar refineries (Sugarland, TX), cereal companies (Battle Creek, MI), the Morton Salt plant (outside Salt Lake City), auto manufacturers (various locations), oil refineries (East Texas), paper mills and cotton gins (all across the American South). Find out what is manufactured or processed in each area where you will be traveling and call the plants involved to see if they offer tours. Many do, and often without advanced reservations. Some plants may restrict access to only certain age groups due to health or safety concerns. Check to make sure your family can get in before making plans to go. (all ages as permitted)

Trains, and Boats, and Planes

Riding the Rails

- 1. Enjoy the Adventure** - A trip by train is an adventure in itself, as passenger trains become less and less common in many parts of the world. Take advantage of every part of this trip to enjoy the luxury of a comfortable way to see the country without having to drive. Let your children tour the train as freely as possible, and be sure they see the dining car. (everyone)
- 2. The Conductor is Your Friend** - Make a friend of your conductor. (S)he can be a wealth of information and a source of much help for any problems or needs you have. If yours is friendly and not too busy, let the children ask questions about the train, your route of travel, areas through which you are passing and things to keep an eye out for along the way. (all ages)
- 3. What's the Difference?** - Remind your children that, in many ways, train travel is very much like it was 100 years ago and let them try to guess the differences. (5 and up)
- 4. Keep a Sharp Eye Out** - Whenever possible, let the children sit near windows so they can take in all the interesting sights you will be passing. Have children draw or write descriptions of things of interest they see outside. These should be kept in a notebook or journal as a record of the trip. Photos can also be used but it is often hard to get good pictures from a moving train. (5 and up)
- 5. Put it All in Focus *** - If you have a **digital camera or cell phone with photo capability**, let the children try their hand at taking pictures of objects outside the train. When they discover the distortion of most photos, analyze together how the motion of the train caused it. Don't tell them that, lead them to discover it for themselves. (8 and up)
- 6. Read All About It *** - This type of travel really lends itself to lots of reading time, so bring along the **books**. Even **workbooks** and other traditional **schoolwork** may be welcome as a way to pass the time if you are traveling a long way. Just don't resort to that unless there is nothing else available to hold the child's interest. (all ages)

On the Water

1. **Check out What's Offered** - Travel by boat is most likely to be on an organized cruise. Cruises almost always offer a wide range of events for children and adults. Many even have fulltime 'day camp' style programs for children. Take advantage of any of these that interest you, but don't spend all of your time apart. (all ages)
2. **Time for the Family** - Even with all the organized activities for various age groups, a cruise should offer lots of time for your family to be together as well. Take time to swim, play games, see shows, or 'hang out' together as a family. This can be a really valuable bonding time for all of you. (everyone together)
3. **Map It *** - Your cruise line probably offers a map of your voyage or has one posted on the wall in some of the public areas. This will provide a chance for your children to practice mapping skills as they trace the route on their own **world map**, pinpointing all stops made on the cruise. Then, they can track the ship as it travels.(all)
4. **Go Ashore** - Whenever the ship docks, take your family ashore. There will be planned shore excursions, but you may have more fun on your own. Wander around on the shore. Look for local guides who may be taking groups to out-of-the way places. Try to get away from the tourist traps immediately on shore and soak in some of the real local culture. It might be wise to research beforehand to find out what's fun to do in each port you will visit. You may even be able to make reservations and schedule transportation before the ship docks. Be sure to take cameras, binoculars, sunscreen, and any special gear you will need for where you are going. These will be for sale or lease onboard and/or at each destination, but usually at high prices. (everyone)

Fun if by Air

1. **What's the Best Way to Get There?** - If your children are pre-teens or teens, let them have a part in planning the trip. Perhaps they could do the online research to check and compare prices, find the best flights, reserve tickets, and arrange ground transport as needed.)ages 12 and up, if mature enough)

2. **Take a Look Around** - Arrive at the airport early enough to do a little exploring after you check in. Let the children ride the tram, subway, moving sidewalk, or whatever conveyance that airport offers to move passengers from one place to the other. Discuss what it is called and how it works. (all ages)
3. **Up, Up and Away** - Let little ones watch other planes take off and land. If they have never flown before, use this to prepare them for what to expect. Talk about anything that particular interests them on the topic. (3-8 or older)
4. **What's All This About?**- Be sure to explain (perhaps on the way to the airport or while waiting in line) what happens at the security checkpoints (and immigration counter if that will be part of your trip) so they will not be frightened or apprehensive when they have to go through it. Perhaps, if it is a slow traffic day (you might do best with midday flights on a weekday), some of the security personnel will be able to show the children their equipment and explain their job and its purpose. (5 and up)
5. **Where Are We Anyway?** - Before leaving home, give each child a map showing your points of arrival and departure and have them map the most likely course for the plane to travel. Make note of any specific things of interest they should be able to see from the air and try to help them find those when you are up there. (5 and up)
6. **What's Available up There?** - Check out the pocket on back of the seat in front of you for magazines or children's activity books. Many of these items contain education materials for children about flying and the airline industry. If items of this nature are not in the seat back pocket, ask the attendant if they are available. If so, get one for each child and let him/her do as much of it as (s)he can. (3-10)
7. **What Are You Doing Here?** - If possible, encourage your children to talk to flight attendants and other airline employees (an excellent activity for a layover) about their jobs. Help make a checklist of questions such as: "What do you do when the plane is not in the air?" "How did you train for this job?" "What is the hardest part of your job?" "When and why did you decide to work in this field?" Your child can probably think of others. (middle school and up)

8. **Take Your Time** - Using a sky map showing the actual route taken by your domestic flight, plot that route over a U. S. road map covering the same area. Have the student use mathematical formulas to calculate the distance traveled by the plane and compare it to the distance of a road trip to the same location. (high school)

9. **Boy, That's Fast!** - Using information obtained in the above activity and the posted departure and arrival times, have students use the correct formula to compute the speed of the airplane. Be sure to subtract layovers and stops from the total time in the air. (high school)