FOR THE RECORD

A 4-H Member's Guide for Completing 4-H Records





ACKNOWLEDGEMENTS

AS IN ANY PROJECT OF THIS MAGNITUDE,

many people helped provide input and creative suggestions along the way. Foremost, we must thank the hundreds of Montana 4-H youth who provided ideas and suggestions through focus groups, interviews and personal contacts. Their recommendations provided the basis for the current record keeping system. In April 1997, a committee of volunteers, agents, and specialists gathered in Lewistown for three days of intensive meetings to revamp and simplify the Montana 4-H record keeping system. Grateful acknowledgment goes to the following people who labored through snow and sleet to create this new system: Mike Schuldt, Garfield County Extension Agent; Jim Moore, Judith Basin County Extension Agent; Debbie Donovan, Valley County Extension Agent; Tom & Penny Suhr, Madison County 4-H Volunteers; Karin Ludeman, Gallatin County 4-H Volunteer; Judy Brenner, Gallatin County 4-H Volunteer; Chet Hill, Roosevelt County Extension Agent; Dave Bertelsen, Wibaux County Extension Agent; Harold Johns, Silver Bow County Extension Agent; Cheryl Weatherell, Flathead County Extension Agent; Sheila Friedrich, Sheridan County Extension Agent; Nick Shrauger, Gallatin County 4-H Volunteer; Janice Shanks, Valley County 4-H Volunteer; Grace Pankratz, Valley County 4-H Volunteer; Alice Redfield, Valley County 4-H Volunteer; Barbara Wells, Lewis & Clark County Extension Agent; Mike Cavey, 4-H Youth Development Specialist; Kirk A. Astroth, Director of the Montana 4-H Center for Youth Development.





NO, NOT that KIND OF RECORD THIS KIND OF RECORD...

This kind of record is the one which records your accomplishments and triumphs during the year. 4-H Records are cool! And fun! It's like writing your own history. Because they help you keep track of what you do. And they help you review what you've learned in your projects! Records are your way of saying:

**M did it! | Rule!

"I ala IT! I Rule!

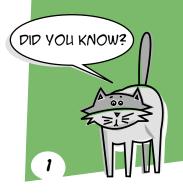
4-H wouldn't be the same without records. They're an important part of completing each project. They help you set some goals, keep track of your attendance at meetings, record your demonstrations and talks and a whole lot more.

This booklet will help you learn how to keep better records, and complete your book each year-for fabulous prizes and recognition! Like what you ask? Well, for instance, completing your record book can give you a sense of personal accomplishment. You did it! Records can:

- help you earn credit for completing the 4-H year-
- make you eligible to participate in other activities-
- give you the ability to earn premiums for fair awards-
- set your own record by setting challenging goals and more!



Probably the best-known record of all time is The **Guinness Book of World** Records. First published in 1955, it was an immediate best seller and has been ever since. But most people don't know that Guinness had little to do with it. In fact, it was the brainchild of Sir Hugh Beaver, a Guinness company executive. After a day of bird game shooting in Ireland, Beaver and his shooting buddies got into an argument over which bird was the fastest game bird in Europe. Even a search of the extensive library nearby was no help. Beaver thought there must be lots of other people having similar disagreements, so he decided to produce a book to settle these arguments. Beaver was never in 4-H, but he liked to keep track of the best, the fastest and biggest of everything. You could say he made record-keeping famous. Now, you can follow in his footsteps.





Brain Teaser #1

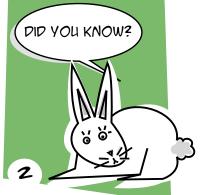
A bottle of special soda costs \$10. The soda itself is worth \$9 more than the bottle. How much is the bottle worth?

(Answer on last page)

You should never set a bird cage on top of a television. Certain rays emitted by a TV can kill some birds.



Hedgehogs are examples of nature's way of combining traits of several animals. For defense, a hedgehog has spines like a porcupine and curls up into a tight ball like an armadillo.



Each 4-H member who completes a record book will earn the "Gold Seal of Excellence" award. How do you earn this? Just do the following...

Enroll in and complete at least one project.

Come up with at least 3 goals for yourself to accomplish during the 4-H year. What do you want to do this year?

Complete the "My 4-H Year" (2FM263) journal form.

Fill in each of your record journals with the things you do throughout the year.

Participate in at least 3 activities such as judging, demonstrations, public speeches, tours, reports at club meetings and record them in the appropriate section in "My 4-H Year" (2FM263).

List any awards and honors you receive.

Complete the Project & Financial Journal (2FM264) for each project you were enrolled in.

If you own an animal, keep records for it-no matter what type it is! Fill in all the appropriate parts of the Animal Record (2FM265).

Keeping records is a great way to hold onto your memories about each incredible year you have in 4-H. In a couple of years, you can look back on these journals and remember what fun you had.

Keeping records is also a great way to develop your skills in communicating, organizing your time, documenting events and actions, evaluating your own efforts, setting goals, solving problems, keeping track of money.

Records are like journals-they're a way to keep track of what you do and when you do it. Think of your records like an entry book, kept regularly. Even daily if you want to keep track each day. The important point is:

WHEN SOMETHING IMPORTANT HAPPENS, WRITE IT DOWN.

You're doing this for yourself. What do you want to remember about your year in 4-H? It will be your record of progress. Remember-these are your records. Make them fun. Make them yours. Make them creative. Make them memorable. Add pages as you need them. Design your own unique page. Put them on computer. Add to your records so that they become your scrapbook. Add photographs.

What's the best way to assemble your records? There are three major record forms. At the minimum, you may need the first two journal forms. If you own any kind of animal (including a pet), you'll need all three forms. Get copies of all the 4-H record forms:

ASSEMBLING YOUR JOURNALS-

"My 4-H Year" (only one form each year) #2FM263,

"Project Journal" (one for each project you carry) #2FM264,

"Animal Record" (you own an animal-any animal, OK?) #2FM265

HOW TO COMPLETE YOUR RECORDS



MY 4-H YEAR

Start with "My 4-H Year" in the front. This record introduces the great, wonderful YOU! Who are you? What did you want to accomplish in 4-H this year? What projects did you enroll in? What committees did you work on? Give any talks or demonstrations? Participate in any judging activities or other activities? What awards or recognition did you get? Add extra pages as you need them. Be creative! This is "your" record.

These are my Goals:

Participate in at least one community service project

Complete 2 projects

Give a demonstration

Serve as a club officer



This is a list of my projects:

Market hog	Gardening
Photography	
Woodworking	



The usual way to tell a horse's age is to look at its teeth. At 6 months of age, a horse has only 4 major teeth (incisors), by 2 years it has 6 and these go on growing until these baby teeth are replaced by permanent teeth at about 4 years old. The growth and changing shape of the teeth are fairly accurate guides until the horse is about 9. At 10, a groove on the side of the rear teeth appears (called Galvayne's groove) and this groove reaches about halfway down the tooth by the time the horse is 15 years old. From 25 to 30 years, the groove slowly disappears.

Get in the groove-do your records and show how long you've been active in 4-H.



CLUB AND PROJECT PARTICIPATION

Number of meetings I attended - check or make notes

					/ April	ividy	June	July	Aug.	Sept.
Club 2	1	1	1							
Project 1	1	2	1							

COMMITTEES + OFFICE SUMMARY

Name of Committee or Office	Description/What I Needed to Do
Community Service	Member - Helped clean 2 miles of highway
Treasurer	Kept financial records for our club float (PID YOU KNOW?)
Committee	Member- helped build float
	503





HOW TO COMPLETE YOUR RECORDS

MY 4-H YEAR (CONT.)

PROMOTIONAL PRESENTATIONS

Promoted or publicized 4-H (news article, talk, radio, TV, 4-H Ambassador responsibilities, etc.) Examples: Martin Luther King Day, ads, displays.

Gave a speech in recognition of Martin Luther King Day
Wrote an article about 4-H for our newspaper

I TOOK PART IN THE FOLLOWING COMMUNICATIONS ACTIVITIES:

Demonstration/illustrated talk, Kiwanis report, reports at club meetings, public speaking, etc.

Type of Communication	Title	Event or Location
Demonstration	™I'm Hog Tied	Club meeting

AWARDS + HONORS

Include 4-H & others (You may add additional pages; you may include fair exhibits)

Date Activity/Event	Award	Location
3/O5 County Demonstrations Day	Blue	Helena
		7-100





Montana 4-H Center FOR YOUTH DEVELOPMENT

Use this page to record **all** activities, events and experiences as you have them. Include such things as school, sports, church, home chores, civic and volunteer activities:

Meetings School
Workshops Safety
Contests Citizenship
Tours Leadership

Sports
Recreation
Judging Events
Camps

		4	
Date	Type of Activity or Event	Location	Description
10/13	Project workshop on rabbits	Livingston	Fitting & Showing
11/9	Tour of Andy's farm	Wilsall	Saw his projects
2/23	Judging clinic	Clyde Park	Learned how to visually
			evaluate animals
3/2	Citizenship seminar	Helena	Participant
4/15	Junior cheerleading clinic	Livingston	Scho ol
6/10	Attended county camp	Camp Luccock	Camp
			/
			-30
			-35
		~ /	
	44		





A certain pet shop sells large birds and small birds. Each large bird brings twice the price of a small one.

A lady came in and purchased five large birds and three small ones. If, instead, she had bought three large birds and five small birds, she would have spent \$20 less.

What is the price of each bird? (Hint: one large bird = 2 small birds.)

(Answer on last page)



PROJECT + FINANCIAL JOURNAL

Next comes the Project and Financial Journal. You'll need one of these for EACH project you enroll in. This is where you keep track of important events and activities in each of your projects as you do them. This is also the place to keep track of expenses and income for your non-animal projects. Expenses for animal projects should be recorded in the Animal Record. Make these fun-add photos, stories, newspaper articles, ribbons, whatever you feel is important.

This is what I plan to do in this project:

Select a calf using frame score information.
Learn about how to feed my calf.
Learn about meat products.
Have Fun!

Date	What I Did - What I Learned				
10/3/05	Attend beef project meeting- learned how to				
	select a calf				
11/6/05	Attend beef project meeting-				
77	learned about feeding my calf				

In some of your project manuals, you've probably noticed other record forms. For example, in the foods projects, there are record sheets in the back of each manual for you to fill out. The Teen Leadership project also has special record forms. What should you do with these? Put 'em in your book right here with your project and financial records. They'll just add to your record of memories!



60 FIGURE!

	Date	Description of Income or Expense	Income	Expense
3	/10/05	Purchased film for my camera		\$8.26
_				
_				



ANIMAL RECORD

Next comes the Animal Record. If you have an animal (usually they have four legs-like a cat, horse, dog, goat, rabbit or pig, but chickens have only two legs) you'll need this form. Again, keep track of the things that apply to your animal.

Look at the first page. This page is where you record information about your particular project animal. When did you get your animal? How much did you pay for it? Where did you buy it? Write these things down in the first box.



Date	Description	Number	Purchased/Owned (from whom)	Weight	Unit Price	Market Value
10/05	White leghorn	5	Dunlaps	N/A	.79	\$3.16
1/06	Crossbred calf	1	Simons	425	.90	\$382.5O

FEEDING RECORD

Certainly, you feed your animal or animals, don't you? Write down how much and how often you feed it on the second page. Be sure to include what kind of feed you're giving your animal (Dog food? Rabbit pellets? Hay? Concentrate?).

Rats are intelligent animals and can be trained to do tricks... but they're not smart enough to do 4-H records!

Kind of Feed	Layer Crumb		Pasture		Dog Food		Oats	
Month	Amount	Price	amount	Price	amount	Price	amount	Price
October	50 lbs.	\$7.25	5 acres	\$1O	40 lbs.	\$16	20 lbs.	\$1.7O
November								

MARKET ANIMAL GROWTH RECORD

If you're enrolled in a market hog, market beef or market lamb project, you'll need to fill out the form at the bottom of page 2. It's specifically designed for market projects. You'll need to keep track of important things like your animal's name, the animal's beginning weight, its final sale weight, the date on which you purchased your animal, your animal's birth date and other information. If you have poultry, for example, the start date may be the hatch date. You'll probably want to ask your parents or an older 4-H member for help in figuring the weight your animal gained, average daily gain and feed cost per pound of gain. You can also put these numbers on your stall card at the fair and help people know more about your animal. All of this goes on the form on page 2.

Did you know... A three ounce serving of cooked lean beef provides about 10% of the calories, 14% of the fat, and 56% of the protein you need each day.

Name of Animal Geese (6)	Birth Date	Date Project Started 4/9/98	Starting Weight	Date Project Ended 7/9/98	Ending Weight	_	Total Days Fed 90	Avg. Daily Gain	Feed Cost Per Lb. Gain
	47 77 70	4/ 7/ 70		77 77 70	17 103.	17 X O	70	.21	.52

7



HEALTH RECORD

Did your animal need any health care? Did it get sick? Write it down on the form on page 3.

Date	Reason for Treatment	How Administered o	Number f Animals (Total Cost= of animals x cost
6/04	Coccidiosis	drinking water	25	1 tb./gal.	0.10	\$2.50
	00001010313	drinking water	23	T CD.7 gai.	0.10	Ψ2.50

EXPENSES OTHER THAN FEED

Any other expenses? Write these in on page 3 too.

Item (e.g., Taxes, Interest, Marketing, Transportation, Show Expenses, Insurance	Cost
Fair entry fee	\$1.5O
Waterer	\$2.75

SALES RECORD

Did you sell your animal at the end of the project, or did you keep it? Write down this information in the Sales Record on page 3.

Animals Sold (include wool, etc.)	#	Date	Place Sold	Sale Weight	Selling Price	Total Sales
Geese	3	7/15	Fair	20 lbs.	\$45.00	\$135.OO

PRODUCTION RECORD/ANIMAL BREEDING PROJECT

If you're enrolled in a breeding project, you'll need to do the form on page 4. If you're not, don't worry-be happy!

Dam ID	Date Bred	Sire ID	Date	Number Born Offspring Born		Number birth weight	
#697	4/15/04	#8474	2/15/98	1 male	90 lbs.	1 male	1 male

Finally, you should fill in the information for the chart on page 1 of this animal record for the value of any animals you owned at the end of the project year (about September 30). If you still owned your dog or horse, for example, how much do you figure it is worth now-after you've spent time training, feeding and caring for it? Do you still have geese that you didn't sell? How much are they worth?

If you kept any of your 4-H project animals, even breeding stock, you need to enter information about them here.

VALUE OF ANIMALS OWNED AT END OF PROJECT

Enter the value of all animals you owned at end of the project year.

Date	Description	Number	Weight	Estimated Value/Price
9/30	Horse (mare)	1	N/A	\$2,600.00
9/30	Rabbit (buck)	4	5 lbs.	\$20.00 each
9/30	Dog- Rover	1	60 lbs.	\$300.00

Start with the date-probably close to the end of the 4-H program year, which is September 30. Then, describe what kind of animals you still own. Next, enter the number of animals of that type that you own, the weight and the estimated value of your animals. This could be the price you might get for selling an animal. Your total here will become "Item B" and will be used in your project summary, which we'll cover next.



Brain Teaser #3

What's the difference between turtles, tortoises and terrapins?

(Answer on last page)

Brain Teaser #4

Suppose you and a friend have the same amount of money. How much must he give you so that you have \$10 more than him?

(Answer on last page)

Some breeds of birds can be taught to speak. The most difficult words to teach a bird are words beginning with the letters M, N, L, and S. Words starting with the letters P, T and K can be taught much easier.







Brain Teaser #5

In a certain lodge, each member was either a Republican or a Democrat. One day, one of the Democrats decided to become a Republican, and after this happened, there was the same number of Republicans and Democrats.

A few weeks later, the new Republican decided to become a Democrat again, so now the numbers were back to where they were at beginning. Then another Republican decided to become a Democrat, at which point there were twice as many Democrats as Republicans.

How many members did the lodge contain?

(Answer on last page)

COMPLETING YOUR ANIMAL PROJECT SUMMARY

At the end of the 4-H program year, everyone who owns an animal will need to complete the Project Summary at the end of the Animal Journal. This summary is useful whether you had one animal or several. You'll probably want to complete this summary after your county fair so you can include any income you receive from selling your animal(s).

This project summary will help you understand how much you spent, how much money you received and what the difference was (called "net income"). Don't worry if that sounds confusing right now-we'll see how to figure it in a minute.

CALCULATING YOUR EXPENSES

Here's the first step. In your animal record, you should have recorded most of your expenses throughout the year (if not, you'll find this hard to do). For instance, the first thing you should have done was write down the value of any animals you owned at the beginning of the 4-H year (October 1). This chart, "Value of Animals Purchased/Owned," is the first one on the front of the Animal Record (#2FM265). You'll notice that in the last column, you are asked to estimate the market value of all your animals. At the bottom, you should write in the total value amount. This total is "item a" that should be transferred to this Project Summary as the first entry in the "Expenses" column.

The second entry in the Project Summary is your total feed costs. Again, if you turn back into your animal record, you'll find the chart for feed costs on page 2. Total all your feed costs and this amount becomes "item c" at the bottom of this chart. Transfer this amount to your Project Summary.

Next, total your health expenses. Any health-related expenses you had to make during the year should have been recorded on the chart at the bottom of page 3. This total becomes "item f" on this chart and you transfer it to the Project Summary under expenses.

Finally, you should also total your other project-related costs from the chart in the middle of page 3 called "Expenses Other Than Feed." For example, if you had to pay entry fees for shows or fairs, transportation costs, insurance premiums, taxes-anything that you had to pay that isn't entered on some other expense chart. Total these costs and this total becomes "item e" which is transferred onto the Project Summary under expenses.

If you've done all this, you should have all your expenses in one place. Whew! Take a breather! Now, total this column of figures, and this becomes your total expenses for your animal project or projects. Sha-zam!

But wait! You're not done quite yet. So far, we only have half the story. We still have to show you how to figure out how much income or value you have in your animals. Now, for the rest of the story.....

PROJECT SUMMARY (complete at the end of the year. Use totals from records inside)						
Receipts: Value of animals at end of project (item b) \$ Value of animals sold (item d) \$ Prize Money Received \$	Expenses: Value of animals at beginning of project (item a) \$ Feed Costs (item c) \$ Health Care Costs (item f) \$					
Total Receipts \$ Net Income: \$ (Total Receipts - Total Expenses)	Other Costs (item e) \$ Total Expenses \$	_				

CALCULATING INCOME AND VALUE/RECEIPTS

First, start with the chart at the bottom of the first page. This is the place to estimate the value of any animals you still own at the end of the 4-H year. For instance, did you retain any animals rather than selling them at the fair or some other show? Did you keep one of your heifers for a breeding project? If you owned a dog, you probably are keeping it since you've spent so much time training it. Do you still have that guinea pig? Don't forget your turtle either.

In other words, any animal that you're keeping for another year, you need to indicate what kind of animal it is, how many you have, its approximate weight if that's important, and its estimated price. Here's a couple of entries for examples:



Turtles are long-lived animals. If properly cared for, some turtles can live more than 100 years.



VALUE OF ANIMALS OWNED AT END OF PROJECT

Enter the value of all animals you owned at end of the project year.

	ı	1	1	1
Date	Description	Number	Weight	Estimated Value/Price
9/30	Hamster	2	N/A	\$5.OO
9/30	Sow	1	320 lbs.	\$16O.OO
9/30	Dog	1	70 lbs.	\$200.00
		•		

Your total of the value of the animals you still own at the end of the year becomes "item b" and is transferred to the first entry in the Project Summary under "Receipts."

Next, you'll need to total the value of the animals you sold. Go to the chart on page 3 of the Animal Journal called "Sales Record." If you've kept good records throughout the year, you should be able to simply total the last column on this chart to come up with total sales as "item d." Enter this total on the second line in the Receipts area of the Project Summary.

Finally, total any prize monies or other money you received during the year. Enter this amount in the Project Summary. Total all three for your total receipts.

Brain Teaser #6

Speaking of pets: 56 biscuits are to be fed to 10 pets. Each pet is either a dog or a cat. Each dog is supposed to get six biscuits, and each cat is to get five. How many dogs and how many cats are there?

(Answer on last page)





Brain Teaser #7

Somewhere in the vast reaches of the ocean, there is a very strange island known as the Island of Questioners. The island gets its name from the fact that its inhabitants never make statements; they only ask questions that are answerable by "yes" or "no."

Each inhabitant of the island is one of two types: A or B.

Those of type A ask only questions whose correct answer is Yes.

Those of type B ask only questions whose correct answer is No.

For example, an inhabitant of type A could ask: "Does two plus two equal four?" But she could not ask whether two plus two equals five.

An inhabitant of type B could not ask whether two plus two equals four, but he could ask whether two plus two equals five, or whether two plus two equals six.

So now for the puzzle: Suppose you meet a native of this island, and she asks you: "Am I of type B?" What would you conclude?

(Answer on last page)

CALCULATING NET INCOME

Now, there's just one last step. In order to find out if you ended the year with any money in your pocket, you have to subtract all your expenses from all your receipts. So, take the total receipts, subtract your total expenses, and this will tell you whether you ended the year "in the black" (with extra money) or "in the red" (in the hole).

NET INCOME: \$

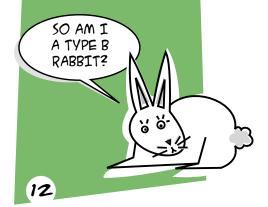
(TOTAL RECEIPTS - TOTAL EXPENSES)

Not every project will result in getting you money nor are 4-H projects designed to make you money every time. For example, you spend a lot on food for your dog. You devote a lot of time to your dog. These are expenses that you only get back in the way of owning a loving, obedient, well-trained pet. But knowing how the year turned out financially is helpful to knowing what you might do differently in the future. And knowing how valuable your pet really is, for example.

At the end of the year, you should date this record form and have your parent or project leader sign, signifying the completion of your project records. Without a complete set of records, your project is not really complete.

YOU'RE DONE!

At the end of the 4-H year, you are required to turn in these records to your club leader. All records will be checked for completeness. For completing your records, you can earn recognition and if your journal is not complete, you'll be given a second chance to bring it up to the standards of completeness. Record keeping can be fun. Strive to make your records unique and reflective of the "real" you. Over the years, your records will become a valuable journal of your accomplishments, trials and efforts through your 4-H career.



FREQUENTLY ASKED QUESTIONS ABOUT 4-H RECORDS

Are the records required,?

Yes, the record keeping system is mandatory. All members are required to keep records as part of their 4-H learning experiences. Counties must use this new approach for record keeping. These revised records indicate the kinds of information that must be kept -- the actual forms are not as important as is the process of keeping records. Some youth will want to re-create these forms on their own computer. This approach is encouraged. In fact, there are now four ways to keep records:

- 1) on the forms provided;
- 2) by downloading the forms from the Web page; (www.montana4h.org)
- 3) by doing them on computer, text-only version files from your county Extension office;
- 4) by creating your own customized forms.

Which format you use is not important. However, the kinds of information you keep must conform to these new records. As an added incentive for using the newly revised records, we are making them in color, and the forms and support manual are being provided to all counties at a minimal cost. The task force believed that such changes would make record keeping more interesting and motivating.

Besides, part of every 4-H project experience is completing your records. Your 4-H project really isn't complete without a set of well-kept records. Completion here means enrolling in a project, learning some things, recording your learnings and closing out your records at the end of the 4-H year.

OK, fine. But why should I keep records?

There are many good reasons for completing your records. For instance, if you complete your records, you'll get credit for completing the 4-H year, you'll be able to get your premiums from fair awards, and you'll be able to participate in trips and other award programs for which records are required. 4-H members who do not keep records will be ineligible to apply for state awards, leadership positions or trips. Beginning October 1, 1997, 4-H records will be required for use in all counties. There are three fundamental forms for record keeping

My 4-H Year (#2FM263)-annual permanent record (4 pp.)

Project and Financial Journal (#2FM264)-one for each project carried (4 pp.)

Animal Journal (#2FM265)-for all those projects involving animals (4 pp.)

These are just the minimum record forms required. 4-H members are encouraged to add to and expand on these records, making their record book truly "theirs" with things valuable and interesting to them.

How is the ™required stuff going to actually work in my county?

Record books are required to be turned in first to the club leader to be checked for completeness. Counties should consider using a team of Junior Leaders and adult volunteer leaders to visit clubs and check record books for "completeness." Some counties will want to have them turned in to the county Extension office and checked for completeness. Books will be checked for completeness against set criteria at the county level (see p. 2 for a list of criteria). For the greatest impact, we suggest that review committees should include half youth and half adults.

What if I enroll in a bunch of projects in the fall, but don't ™complete them all? Can I still earn the ™Gold Seal of Excellence?

Each fall when you enroll in 4-H projects, you should be realistic about how much you can complete. However, we all know that there are times when we can't fulfill all our plans. Most counties have "drop/add" deadlines for this very reason. In order to earn the "Gold Seal of Excellence," one of the eight criteria is that you must complete a project and financial journal for each project in which you are enrolled. The time for making the decision about which projects you have decided to carry should be before your county's "drop/add" deadline. If by then, you're still enrolled in three projects, then you must complete all three, with a project and financial journal for each, in order to earn the "Gold Seal of Excellence."



Did you know...

Guinea pigs are not really pigs at all and they're not really from Guinea. They got this name only because of their "squealing" sounds. They're lovable, popular rodents that are native to South America where they live wild in the mountains of Chile. Guinea pigs were first domesticated by the Incas hundreds of years ago. They are affectionate, social animals that prefer to be kept in pairs.

Brain Teaser #8

A dealer bought an article for \$7, sold it for \$8, bought it back for \$9 and sold it again for \$10. How much profit did she make?

(Answer on last page)



5) The lodge has 12 members: seven are Democrats and five are Republicans.

6) How many cats and dogs do you have? There are 11 possibilities for the number of cats in this puzzle (anywhere from zero to 10), so each possibility can be tried until you find the correct answer by trial and error. But you can also solve this through a surprisingly simple solution if you look at it in just the right light. First, feed five biscuits to each pet since that's the minimum number that needs to be fed. Now, you're left with only six biscuits. The cats already have their portion! So, the six remaining biscuits are for the dogs, and since each dog is to get one more biscuit, there must be six dogs and thus four cats.

N) You would conclude that the questioner is not a native. That's because it's impossible for any native of the island to ask you this question. If a type A native asks, "Am I of type B?", the correct answer is No. (since he isn't of type B), but a type A person cannot ask any question whose correct answer is No. Therefore, no type A native can ask this question. Likewise, no type B native can ask this question either. If a type B native asks this question, the correct answer is Yes, but we know that no type B can ask a question whose answer is Yes. Therefore, a type B native cannot ask this question either. Tricked ya!!

8) How much profit did the dealer make on the article? The correct answer is that the dealer made \$2. There are several ways to arrive at this answer-one solution goes like this: First, after selling for \$8 the article for which she paid \$7, the dealer has clearly made \$1. Now, supposed that instead of buying back the same article for \$9, and selling it for \$10, the dealer were to buy a different article for \$9 and sell it for \$10. Would this really be any different from the economic point of view? No. The dealer would obviously then be making another dollar on the buying and selling of this second article. Thus, he or she has made \$2. Another and very simple proof is: The dealer's total expense is \$7 + \$9 + \$9 + \$10. His total income is \$8 + \$10, giving a profit of \$2.

1) How much is the bottle worth? A common wrong answer is \$1. Now, if the bottle were really worth one dollar, then the soda, being worth \$9 more than the bottle, would be worth \$10. Hence, the soda and bottle together would be worth \$11. The correct answer is that the bottle together would be worth \$11. The correct answer is that the bottle is worth 50 cents and the soda is worth \$9.50. Then the two add up to \$10.

2) What price is each bird? Since each large bird is worth two small birds, then five large birds are worth ten small birds. Thus, five large birds are worth ten small birds. On the other birds plus three small birds are worth thirdeen small birds are worth eleven small birds. So, the difference between buying five large and three small birds or buying three large and five small birds is the same as the difference between buying thirteen small birds and buying eleven small birds or buying three large and five small birds and buying eleven small birds, which is two small birds. We know that the difference is \$20. So, two small birds are worth \$20, which means one small bird is worth \$10 and one large bird is worth.

3) Turtles, fortoises and terrapins all belong to the family, or order, called Chelonia. If it has a shell and is a reptile, it belongs to the order Chelonia. Most Americans use the term turtle to describe a Chelonia that lives mostly in the water but sometimes on land and eats mainly meat. A tortoise lives mostly on land and sticks to a diet that's pretty much vegetarian. Terrapin is used to describe some specific freshwater or saltwater turtles, but the word isn't used very often in America. If you live in Great Britain, a turtle is a saltwater Chelonia and a turtle. If you live in Great Britain, a turtle is a saltwater Chelonia and a terrapin lives in Great Britain, a turtle is a saltwater Chelonia and a terrapin lives in Great Britain, a matter what you call them.

4) How much money must your friend give you? A common wrong answer is \$10. Now, suppose we each had, say \$50. If I gave you \$10, you would then have \$60 and I would have only \$40; thus you would have \$20 more than I, rather than \$10. The correct answer then is \$5.



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