

How I Became A Scientist



Activity Book for 3rd Graders

How I Became A Scientist



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Credits

“How I Became A Scientist”

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Summary

Activity book highlighting how eight people became scientists.
Activities covering topics of their specialties are included.

Special thanks to our Purdue University scientists:

Laurent Couëtil, DVM, Ph.D. - School of Veterinary Medicine

Kauline Davis, Ph.D. - School of Veterinary Medicine

Ulrike Dydak, Ph.D. - College of Health and Human Sciences

Karen Fingerman, Ph.D. - College of Health and Human Sciences

Zoltan Machaty, Ph.D. - College of Agriculture

Cleveland Shields, Ph.D. - College of Health and Human Sciences

Ramesh Vemulapalli, B.V.Sc, Ph.D. - School of Veterinary Medicine

Pat Wakenell, DVM, Ph.D. - School of Veterinary Medicine

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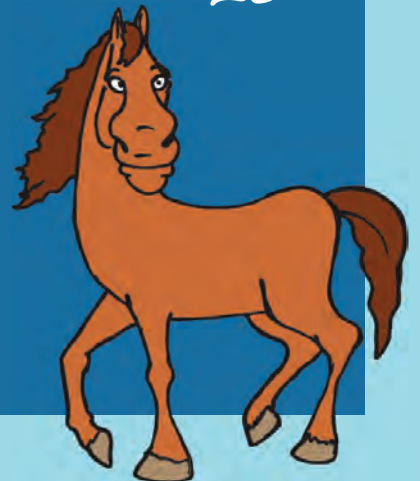
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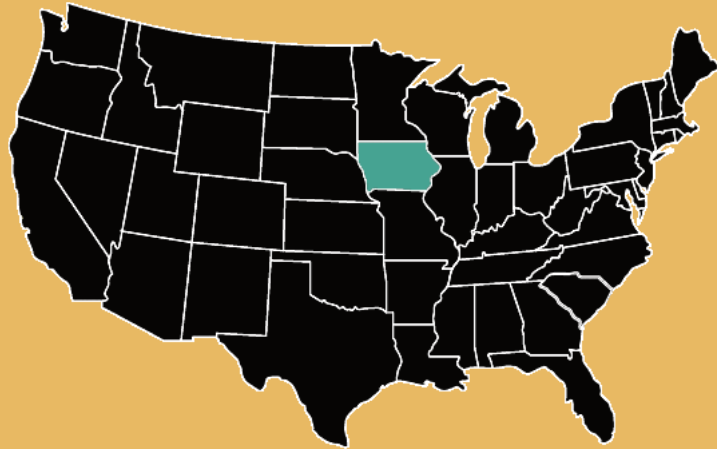
Table of contents

Dr. Karen Fingerman	4
Dr. Cleveland Shields	6
Dr. Zoltan Machaty	8
Dr. Laurent Couëttil	11
Dr. Pat Wakenell	13
Dr. Ulrike Dydak	16
Dr. Ramesh Vemulapalli	18
Dr. Kauline Davis	20



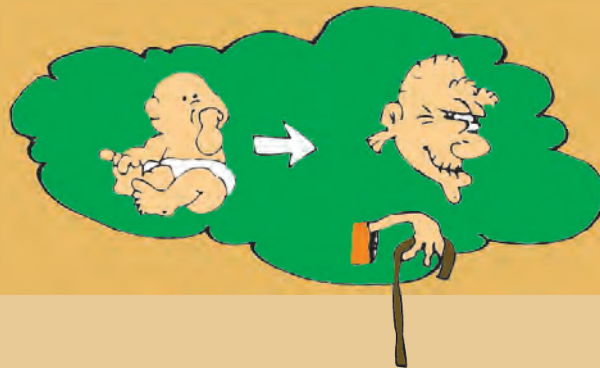
Dr. Karen Fingerman

(Care-n Finger-man)



Dr. Karen is from Iowa
in the United States.

Dr. Karen is a scientist who studies how people grow old. She wanted to become a scientist because she wanted to make up the questions and then find the answers! She says she likes being a scientist because you don't have to do the same thing over and over.



Animals grow old too!

How long do they usually live?

Color the animal who can live the longest purple.

Circle the animals that can live up to 20 years.

Put a rectangle around the pet that can live up to 3 years.

Cats 12- 18 years

Corn Snake 15-20 years

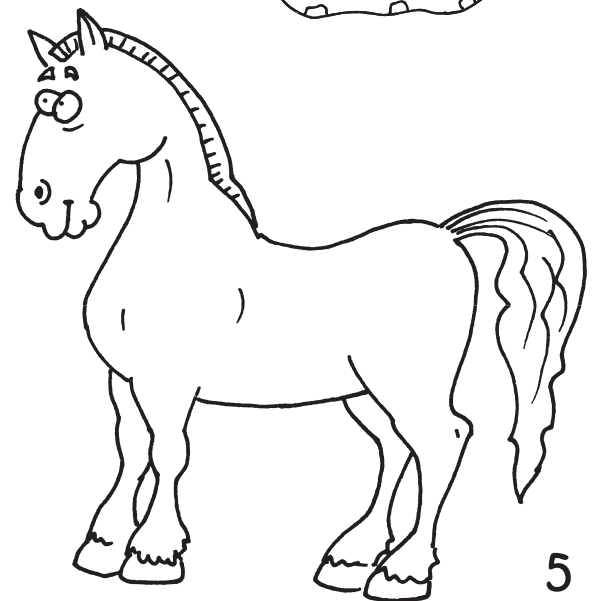
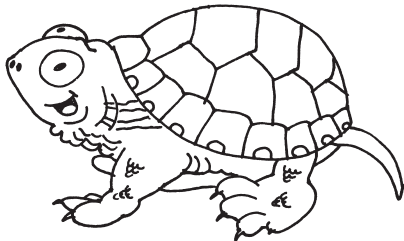
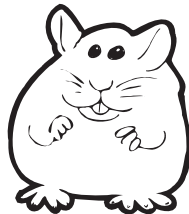
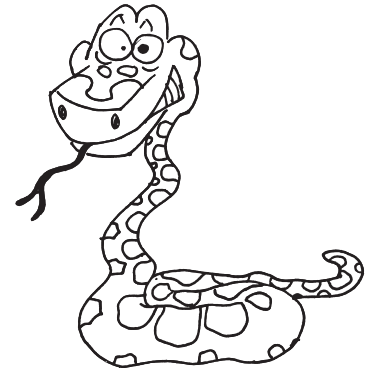
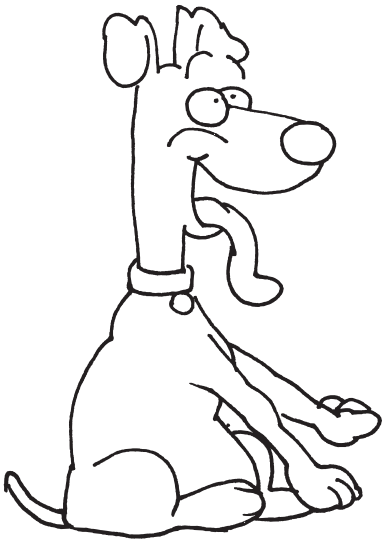
Dogs 7-15 years

Goldfish 5-10 years

Hamsters 2-3 years

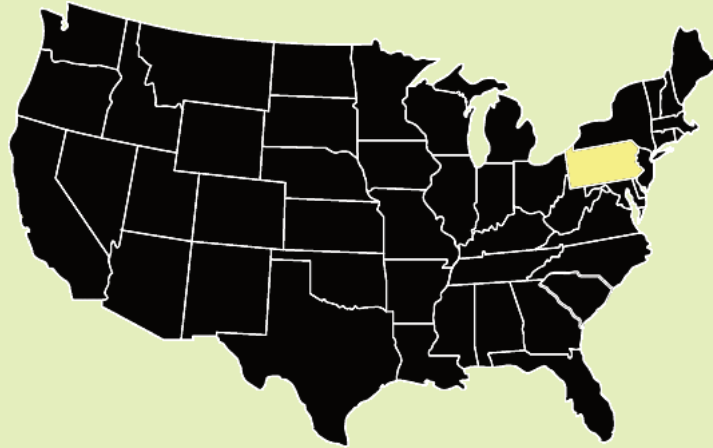
Horses 20-30 years

Painted Turtle 15-25 years



Dr. Cleveland Shields

(Cleave-land She-lds)



Dr. Cleveland is from Pennsylvania in the United States.

Dr. Cleveland is a scientist who works with people. One of the best parts of his job is discovering ways to help families live happy & healthy lives. He researches people's feelings and emotions.



Animals can help people live happy and healthy lives! They can help people exercise or relax by just being with them.



Circle the pictures where animals help people feel happy.

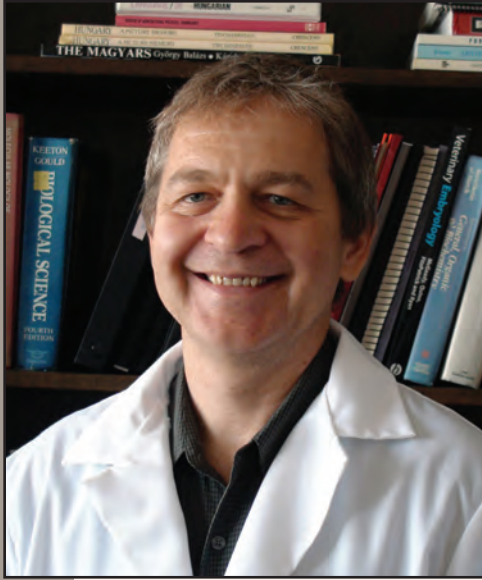


Use colors that make you happy to color the pictures!



Dr. Zoltan Machaty

(Zol-tan Ma-ha-tee)



Dr. Zoltan is from Hungary in Europe.

Dr. Zoltan is a scientist. He loves discovering new things. He would like to discover something big, something really important! He grew up in Hungary, a country in the middle of Europe. He has always loved animals and decided to work with them when he was in college.

Here is Dr. Zoltan in his lab.

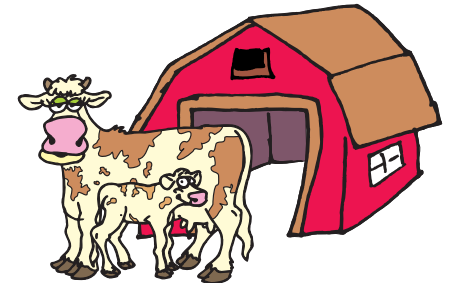
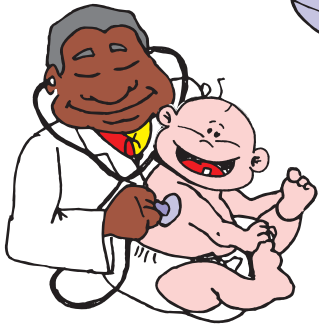
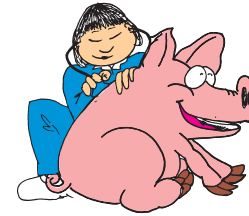
Can you find and circle the hidden animals in his lab?

Sheep Cow Pig Goat Lizard Cat Dog Turtle Parakeet Snake



People and other animals are very different in some ways!
In many ways they are alike!

Draw lines matching the things that people need to the similar things animals need.



Dr. Laurent Couëttil

(Lar-awnt Coo-teal)



Dr. Laurent is from France in Europe.

Dr. Laurent is a large animal veterinarian. He knew when he was young that he wanted to be a veterinarian. He loved horseback riding, sports, and science in school. Today he works a lot with horses and studies their lungs. Horses lungs are very similar to our lungs. Some horses can have trouble breathing just like kids who have asthma. When a horse has trouble breathing it is called “heaves”.



Take what you learned about Dr. Laurent to fill in the missing words below. Use the word bank to help you fill out the sentences. Try not to look back at the last page.

Word Bank Box

breathing lungs asthma horses
veterinarian science heaves sports

Dr. Laurent is a large animal _____.

He studies horse's _____ which are similar to human lungs.

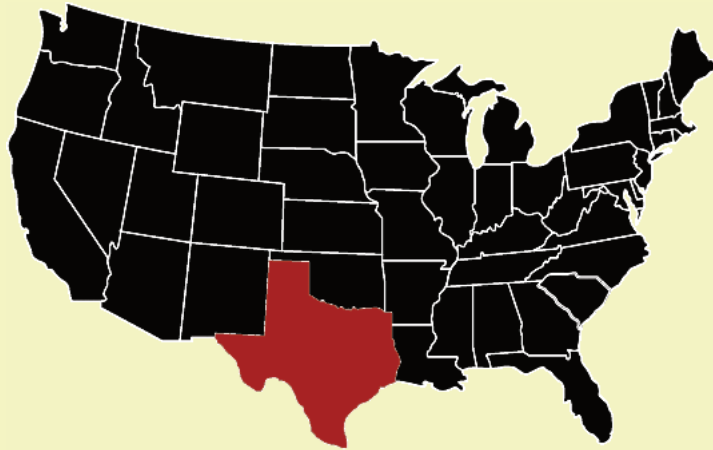
Dr. Laurent liked _____ in school. He also liked horseback riding and _____.

Some _____ have trouble _____.

When kids have trouble breathing it is called _____, when horses have trouble breathing it is called _____.

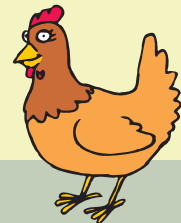
Dr. Pat Wakenell

(Pat Wake-nell)



Dr. Pat is from Texas
in the United States.

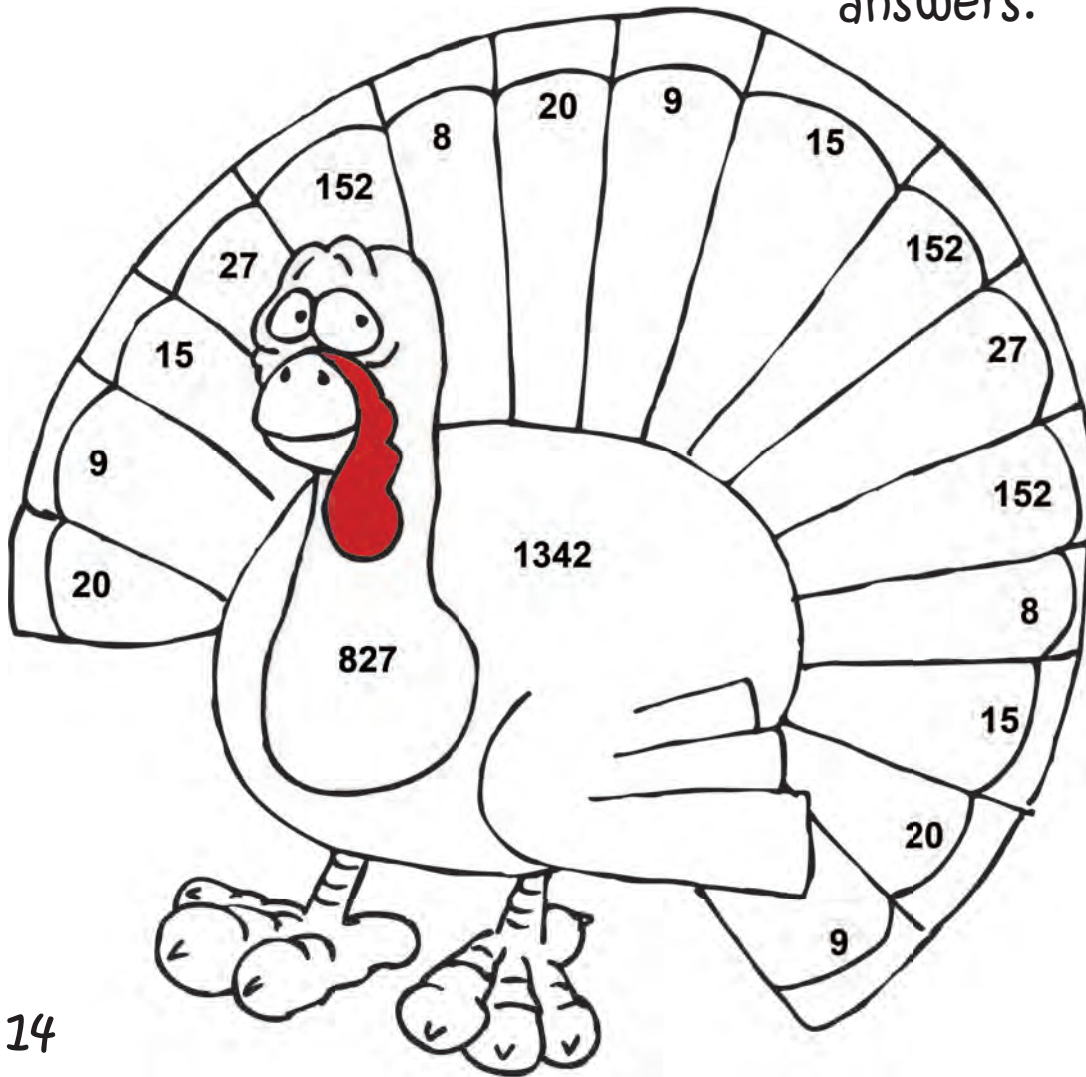
Dr. Pat is a veterinarian who works with poultry. Poultry veterinarians work with all sorts of birds, including chickens, quail, turkeys, and even ostriches! When she was younger she was always very curious! She liked to figure out how things worked and liked to fix things. She liked puzzles, reading mysteries, treasure hunts, and animals. Her favorite subjects in school were art and science.



Turkey Math

Did you know the snood is what hangs over the turkey's beak?

Solve the problems below. Color the turkey with the same color as the problem. The numbers on the turkey should match your answers.



$$\begin{array}{r} 895 \\ - 68 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ - 66 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 465 \\ + 877 \\ \hline \end{array}$$

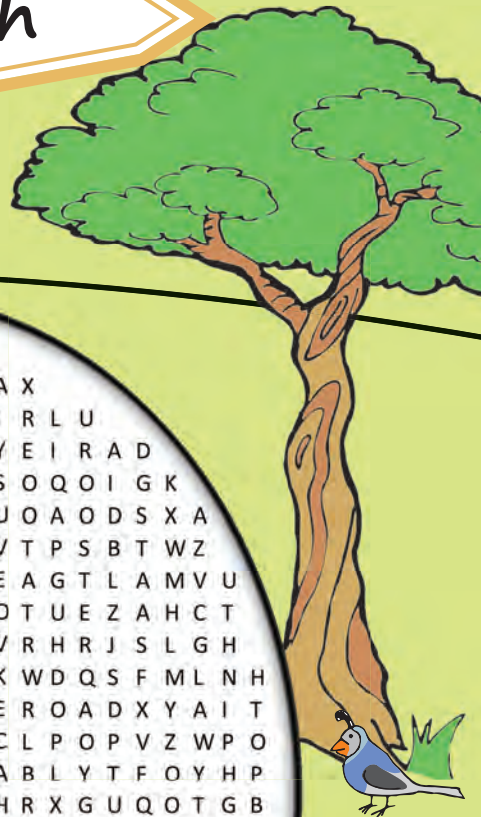
$$\begin{array}{r} 65 \\ + 87 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ \times 3 \\ \hline \end{array}$$

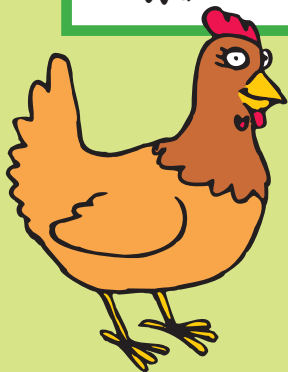
Egg Nest Wordsearch

Can you find these words?
(Hint: Words can be backwards)

Beak
Chicks
Coop
Dog
Duck
Eggs
Feather
Feed
Hatch
Health
Hen
Nest
Ostrich
Rooster
Shood
Temperature
Turkey
Water

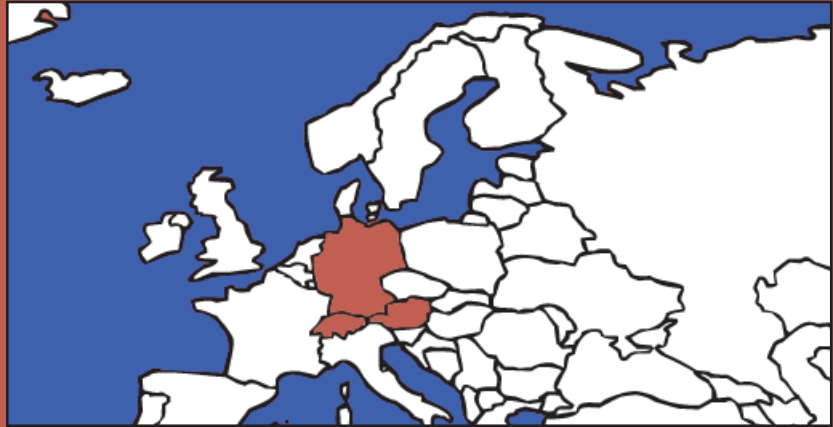


Y L P A D
Z E G G S Y F R A X
K P K L B O W A D H I R L U
V S M K D U C K D O G B Y E I R A D
X F J V N L U G E I P Y E S O Q O I G K
Y S G D C E G E A N L Y K A U O A O D S X A
N X Z L O P W M E B N C U K V T P S B T W Z
F C B N J M S K S O A P T Q R E A G T L A M V U
O E P I G L E T E V I G E F Y O T U E Z A H C T
S N N A K E O S A R S U C M V Y V R H R J S L G H
L Y X C T H P D O P I M O P O T K W D Q S F M L N H
R P K Z O R H U I T E O C R E T H E R O A D X Y A I T
J I L G P F T E A L I X Q H R O E C L P O P V Z W P O
F E E D Y K P J R G O T R P A D O A B L Y T F O Y H P
A M U J W J K O H P E U I L T F Y H R X G U Q O T G B
W G F R H B O P A H M N B Y U O T U P C Q R K S I R R
F I T O N M L T O U I P F R U Z W N O S K C I H C
Y S I A I R U C F W Y A H E N J U I R F E C E U W
V E H K A E B H C I L G N U R T A B N M Y T L P G
W A T E R V T Q I A B W K K Z S O P L E N M L
B C O P E F I B S T U A B U P X N U K T I Z X
M N I Q E A O P O O C T L Z A L O B H X D
N H S P R U W Y E G H T Q D A S U O P A B
M B V O P T J G H I Y U R E A V F D W
A R V Y J L P H E A L T H M O J E
T T L P Y F A L L E Q Y H
K L E V B U U K W
X M D Y J K N
W S A N V



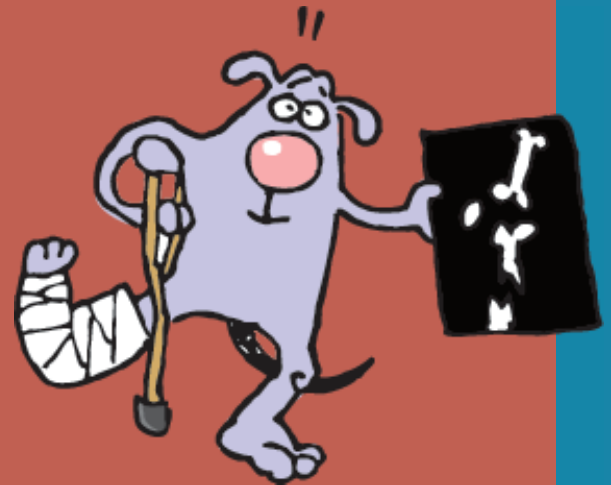
Dr. Ulrike Dydak

(Ull-reek-uh Dee-dack)



Dr. Ulrike is from Switzerland, Germany and Austria in Europe.

Dr. Ulrike loves being able to help people who are sick by using the new technology that she has helped discover. She wanted to become a scientist when she saw a poster with a MRI of a human brain on it.



MRI - Magnetic Resonance Imaging

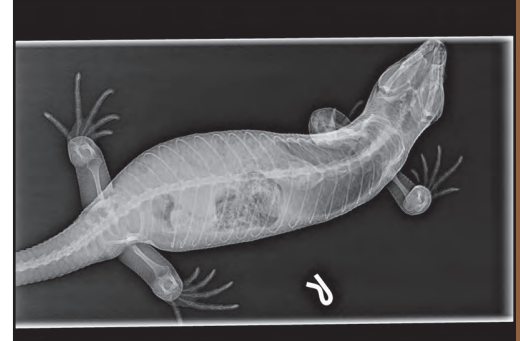
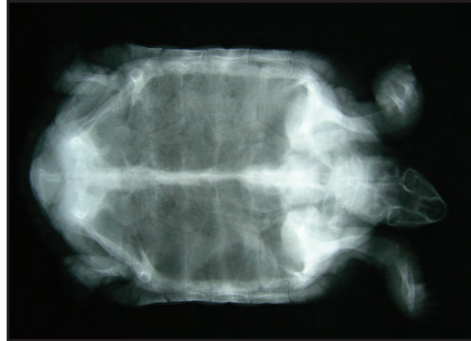
MRI is a way to see inside the body.

Veterinarians use MRIs to look inside horses, dogs, and cats!

Another way veterinarians and doctors look at parts of an animal or person's body is by taking a radiograph. A radiograph is sometimes called an x-ray.

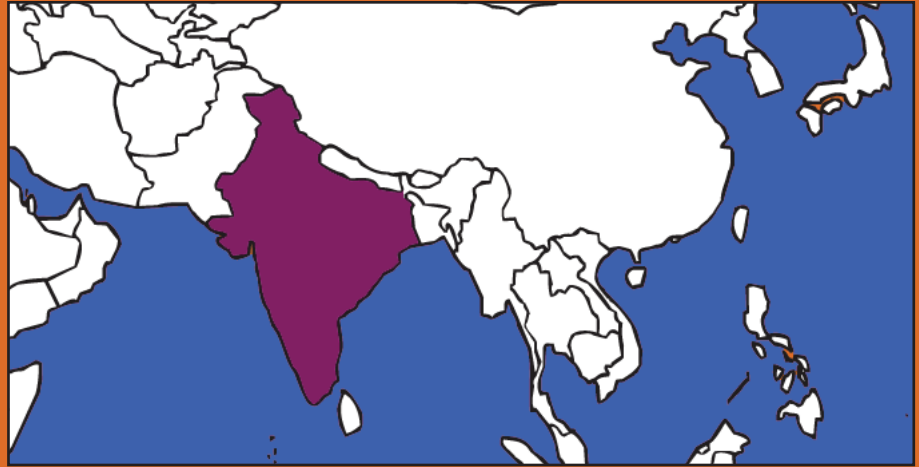
Below are 3 radiographs.

Can you name what animal is in the radiograph?



Dr. Ramesh Vemulapalli

(Ra-mesh Vem-ooH-lah-pah-lee)



Dr. Ramesh is from India in Asia.

Dr. Ramesh is a veterinarian. He studies better ways to test for diseases. He also works on vaccines (or shots) that help prevent diseases. You know those shots you get at your pediatrician's office to help keep you healthy? Well animals need shots too! The vaccines we give to animals keep them healthy and happy. Dr. Ramesh tests animals for influenza (or flu). He can test 96 different samples at the same time!

Complete the problems:

$$\begin{array}{r} 100 \\ - \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 257 \\ - 161 \\ \hline \end{array}$$

$$\begin{array}{r} 3457 \\ - 3361 \\ \hline \end{array}$$

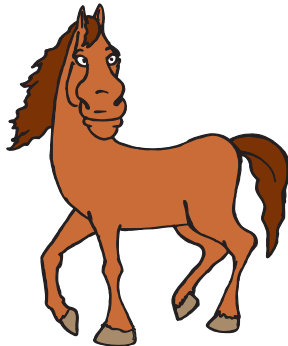
$$\begin{array}{r} 90 \\ + \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ + 44 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ + 21 \\ \hline \end{array}$$

There are many different ways to get to _____, which is how many samples Dr. Ramesh can test at the same time!

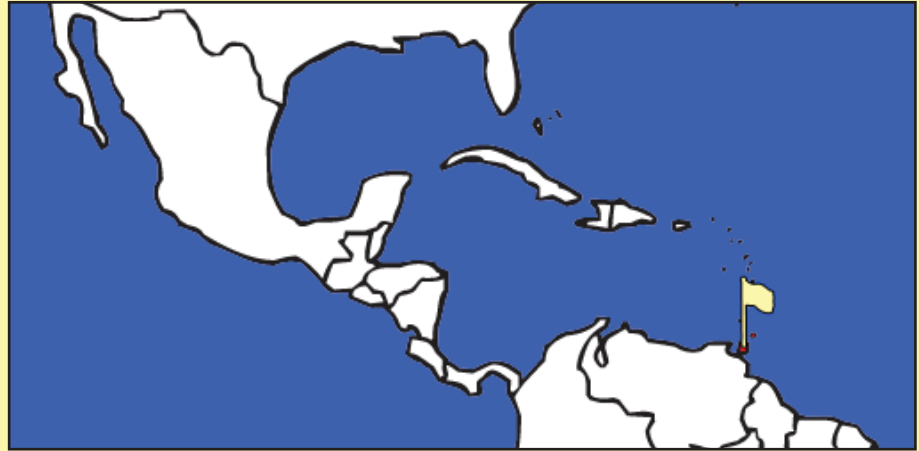
What do all of the animals below have in common?



They all can get the flu!

Dr. Kauline Davis

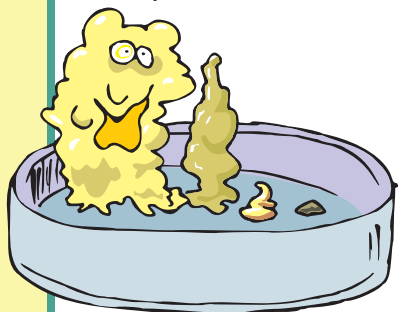
(Call-lean Davis)



Dr. Kauline is from Trinidad and Tobago in the West Indies.

Dr. Kauline is a food microbiologist. Math and biology were her favorite subjects in school. She chose research as a career because she liked asking questions and then figuring out ways to find the answers. She studies microorganisms (or germs) that make people sick when they accidentally eat them on their food. There are lots of different germs that will make you very sick if you eat them on your food. That is why it is so important to wash and cook your food properly to kill all the germs. It is just as important to wash your hands properly before you eat too!

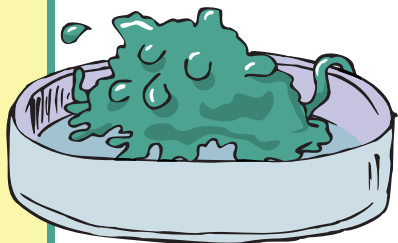
Microbiologists grow microorganisms on petri plates to count them. Below are petri plates with lots of microorganisms. Next to each petri plate is the number of colonies present. Write the number in expanded or standard form.



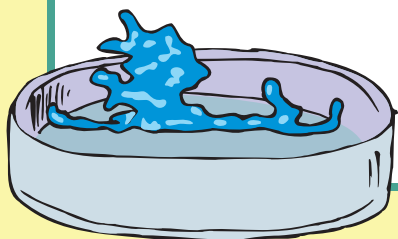
$$2000 + 300 + 20 + 6 =$$



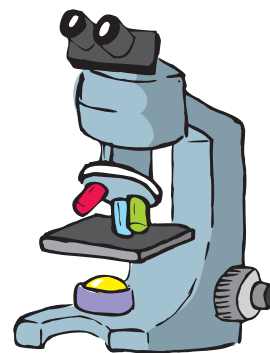
$$30 + 2 =$$



$$1,647 =$$



$$985 =$$



Barnyard Scramble

nickeh _____

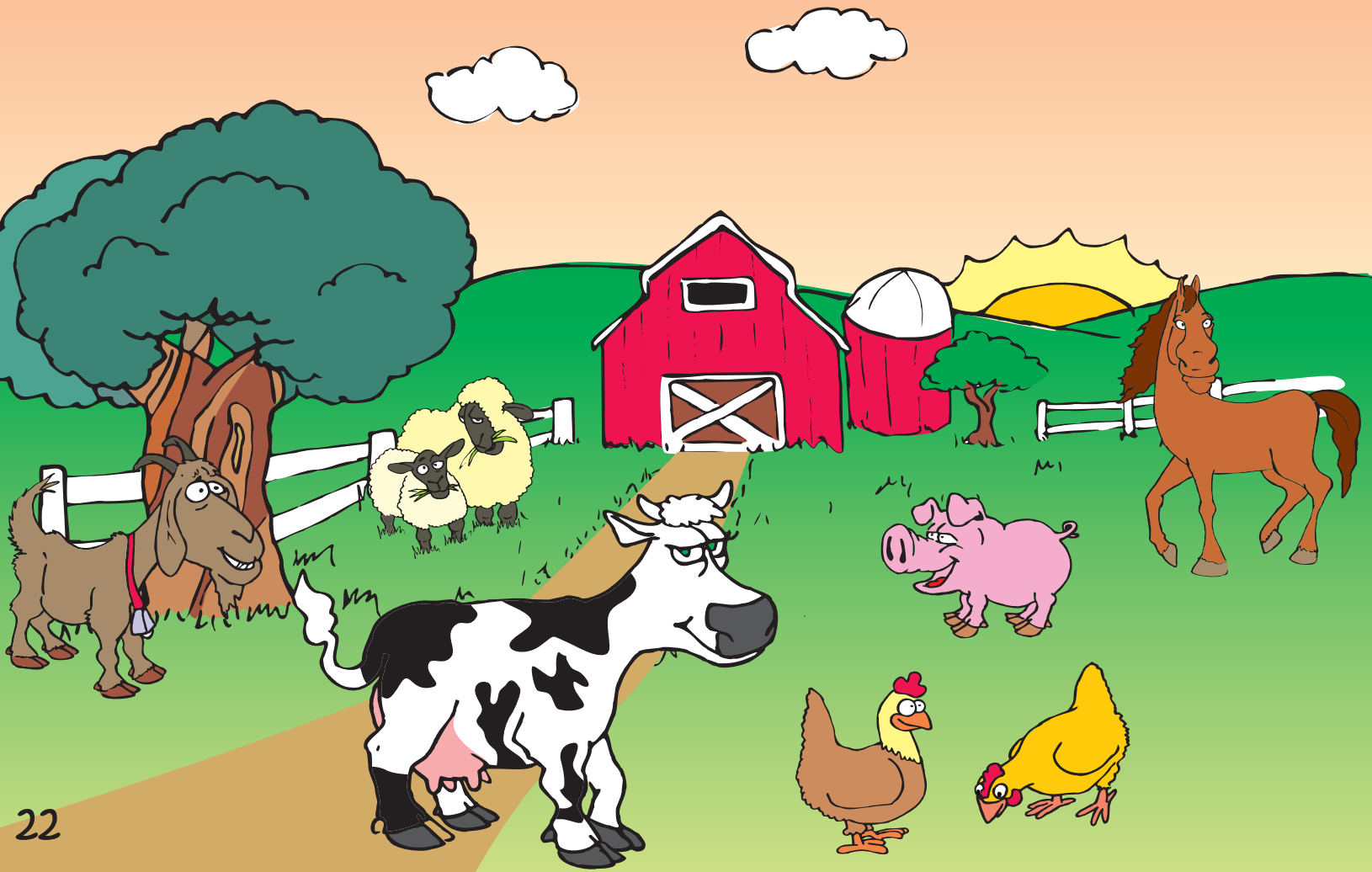
wco _____

tgoa _____

pehse _____

teglip _____

roshe _____



I'm A Scientist

My name is _____

I am from _____

I want to study _____

When I become a scientist I will discover

Glossary

Asthma - a disease in people that makes it difficult to breathe

Discover - look for or find

Heaves - a disease in horses that makes it difficult to breathe (like asthma in people)

Microorganism colonies - very small bunches of microorganisms that grow together on a petri plate

MRI (Magnetic Resonance Imaging) - a way to see inside the body without using x-rays

Petri plate - a round plate used by scientists to grow organisms

Radiographs - pictures of inside the body made with x-rays

Research - searching for new knowledge; studying new ideas

Scientists - people who use science to find answers to questions

Vaccine - a shot that helps protect you or an animal from getting sick

Veterinarians - doctors who help keep your animals healthy and help care for your animals when they are sick or hurt. They also are scientists who research new ways to keep animals healthy.

How I Became A Scientist

Activity Book for 3rd Graders

Scientists have fun and exciting jobs! In this book, you will meet scientists from all over the world who work with animals. These scientists work hard to make sure people and their animals stay healthy. Maybe one day you will be a scientist too! You can start your science training now by completing the activities in this book.

