

THE WARBLER

AN EDUCATIONAL WEEKLY



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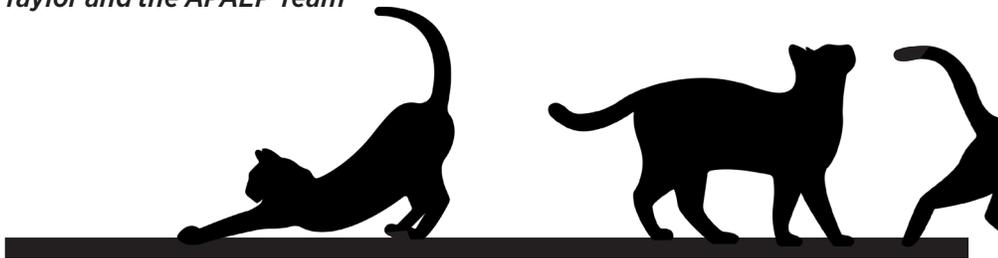
AUGUST 10, 2022

Dear Student, Artist, Thinker, Friend,

I was ecstatic when I learned that this week's edition of *The Warbler* is about cats. My personal favorite thing about them is their broad range of personalities and behaviors. They are creatures of habit, and they do not adapt well to change. If they're comfortable though, they can be very sociable creatures. They've been associated with us for a very long time, and people often have ten of them living in their house. They are very independent, but house cats certainly have a mutually beneficial relationship with us. What's even more interesting is big cats. Unfortunately, people have hunted them to the brink of extinction to sell their beautiful fur. Tigers weigh over 900 pounds, and the strength of their bites is about six times stronger than humans. Despite this, they have facial features that make them look like a big and scary house cat.

Cats are incredibly intelligent, and they have twice the number of neurons that dogs have. Scientists believe they have object permanence, or an awareness of objects that are not in direct eyeshot. They estimate that cats are about as intelligent as a two-year-old human. People often think cats are dumb because it seems like they don't recognize their own names, but they are actually just ignoring whoever is speaking to them. I also love how agile they are when they jump up onto countertops without making any noise in the process. Their communication behaviors are often non-vocal, so they stretch our boundaries in the sense that we are typically receiving the content of messages through our sense of sound. We hope you enjoy the information we have brought you in this week's edition of *The Warbler*.

Taylor and the APAEP Team



"In ancient times, cats were worshiped as gods
... they have not forgotten this."

TERRY PRATCHETT // English Author

WORDS INSIDE

FOUND INSIDE "HOW THE FIRST CAT-LIKE SABRE-TOOTH ..."

doyenne | a woman who is the most respected or prominent person in a particular field

hypercarnivory | animals with more than 70% meat in their diets

FOUND INSIDE "WHY ARE CATS ASSOCIATED WITH ..."

ubiquitousness | existing everywhere, at the same time, an example would be people using the internet

benevolence | kindness, an inclination to be kind, disposition to do good

peripheral | living outside of the boundary or something

FOUND INSIDE "WHAT DO CATS THINK ABOUT ..."

deducing | coming to a conclusion using reasoning, to determine something

indistinguishable | not able to be identified as different, identical

EVOLUTION

How the First Cat-Like Sabre-Tooth Predator Was Discovered — and Why It Differs from Modern Cats

BY MICHAEL J. BENTON | *The Conversation* | March 30, 2022

Although they are currently the greatest predators on land, it's likely that modern-day cats wouldn't have been a match for the newly discovered *Diegoaelurus vanvalkenburghae*. At around 42 million years old, it's thought to be one of the first sabre-tooth cat-like predators to have roamed the planet — and a formidable hunter capable of killing prey much larger than itself.

None of our existing top predators possess a sabre-tooth. But throughout much of the history of wild cats, there have been sabre-toothed forms.

Indeed, from 2.5 million years ago, until as recently as 10,000 years ago, the iconic *Smilodon fatalis* — commonly known as the sabre-tooth tiger — was on the prowl in California and other parts of North and South America. Although its focuses were the large, thick-skinned mammoths and woolly rhinos, early humans might well have been at risk, too.

Though this newly described animal was smaller than *Smilodon*, the sabre-tooth adaptation means it was probably one of the first ever mammalian hypercarnivores, surviving almost exclusively on a diet of meat — a lifestyle followed by modern cats today.

The sabre-tooth discovery

In the new PeerJ study scientists from the University of Arizona and San Diego Natural History Museum describe the new predator, which they named *Diegoaelurus vanvalkenburghae* after San Diego county, in southern California, where the fossil was found, and Professor Van Valkenburgh, the doyenne of carnivore evolution.

The beautiful piece of lower jaw had sat unappreciated in the drawers of the San Diego museum since 1988 — until Curator Ashley Poust found it and recognized what it was. And although it doesn't sound like much to go on, we can actually learn a huge amount about this ancient creature from the fossilized jaw and teeth alone.

At the back of the newly discovered jaw there are slicing scissor teeth, called carnassials — the equivalent of molars and premolars — shaped like flesh-cutting blades with multiple points. Going forward in the jaw, there is a long gap, and then the key tooth, the canine sabre-tooth, elongated and curved. Below that, is an expanded and deepened portion at the front of the jawbone that partly accommodates the deeply rooted canine tooth, and also provides added strength for the jawbone when it bites with force.

The unpreserved upper jawbone would have featured an equivalent canine sabre tooth, which would have cut down outside the jaw as the animal seized its prey.

California in the middle Eocene — the time 42 million years ago when *Diegoaelurus* lived — was a land of rich tropical forests through which the bobcat-sized *Diegoaelurus* slipped silently in search of prey. The forests teemed with rodents and early primates in the trees, as well as larger herbivorous mammals, such as even-toed oreodonts (most closely related to camels and pigs), early hoofed tapiroids, multi-toed horses, and the small rhinoceros *Menoceras*, on the ground.

Perhaps this first sabre-tooth concentrated on hunting these thick-skinned ungulates, leaping from the trees onto their backs and biting suddenly and deeply.

Could the sabre-tooth return?

Although *Diegoaelurus* looked similar to cats, they are, in fact, unrelated. But the sabre-toothed adaptation to hypercarnivory arose independently several times among cats in other extinct sub-families, such as the nimravids, the “sabre-tooth false cats” in North America and Eurasia — and even in the marsupial thylacosmilids, an extinct family of mammals, of South America.

But when *Smilodon* — the last known survivor of the most recent sub-family, *Machairodontinae* — became extinct, probably due to loss of prey or hunting by early humans, the sabre-tooth disappeared.

Most cats today operate as solitary hunters, and so generally tackle prey that is of a similar size to themselves, or smaller, in contrast to the sabre-tooths who were able to take on much larger prey.

The modern family *Felidae* — which includes all modern cats — has 41 species, including the pantherines, such as lions, tigers and leopards, and the felines, such as cheetahs, pumas and caracal.

It could be suggested that sabre teeth are an adaptation that is urgently required by many modern large cats. Lions and tigers do have large canine teeth that are used to pierce and kill — but they could certainly benefit from canines that are longer and stronger. ●



When compared with a skull cast of a *Smilodon*, the *Diegoaelurus* fossil is much smaller with a more pronounced chin bone (lower-right edge).

Photo by Cypress Hansen, San Diego Natural History Museum

“I collect records. And cats. I don't have any cats right now. But if I'm taking a walk and I see a cat, I'm happy.”

HARUKI MURAKAMI // Japanese writer

✎ Edited for space

HISTORY

Why Cats are Associated with Halloween

BY ERIN FLAHERTY | *Cat Connection* | October 31, 2015

We've all seen it: the snarling, hissing black cat figure of Halloween that has been a staple of the holiday for more than a century. For many, this comically scary representation of our beloved house cats is as much a part of Halloween as ghosts, candy corn and pumpkins. But few know the fascinating intricacies of the cat's relationship with the holiday, a history that goes a long way to understanding the way we regard felines even today.

The shared history of humans and the domestic cat is complex, marked by both devotion and animosity (often times simultaneously) and does not follow a single path. What's particularly notable is that while cats may have been persecuted in one part of the world as minions of evil, they could be cherished and revered in another as mousers and companions. But regardless, it is undoubtable that the cat has suffered greatly due to its association with human evil, and it is a testament to the cat's loveability, reproductive prowess and adaptability that they are still with us today.



The Cat Goddesses of the Ancient World

The relationship of cats and humans begins in Egypt and the surrounding region, where wildcats living on the peripheral of human civilization were slowly integrated into a closer relationship with people. Evidence of early cats kept as companions in Egypt stretch as far back as 6,500 years ago, and it is likely that during this time the modern domestic cat began to take shape. Larger than the domestic cat of today, these cats were cherished for their vermin control, particularly following the spread of the black rat from India and Southeast Asia via trade routes 2,600 years ago.

About 3,500 years ago, cats began to feature more frequently in Egyptian cults and religion, particularly with the goddess Bastet. She was originally depicted as a woman with a lion's head attended by smaller felines, but the growing ubiquitousness of domestic cats eventually transformed not only representations of the goddess, but also her association in people's minds.

Formalized Hostility Towards the Cat

The domestic cat spread rapidly throughout Europe in the centuries following its emergence in Egypt. Though just as often regarded as disposable, the cat was also cherished for its mousing abilities and independent nature. For years, cats were depicted posi-

tively in religious texts, and the Christian Church held a generally benevolent attitude towards the feline throughout most of the Dark Ages, as cats featured heavily in monastic life.

Unfortunately, this benevolence began to shift in 391 CE, when emperor Theodosius I banned all pagan worship, including the worship of Bastet and Diana. Cats, still heavily associated with these goddesses, were at first left largely untouched by this proclamation and still enjoyed a relatively positive reception in rural communities, those furthest away from the reach of the Church.

However, all of this changed in the 13th century. On June 13, 1233, Pope Gregory IX identified cats, specifically black cats, with Satan, thus beginning the wholesale persecution of felines in continental Europe.

Witches and their kitty familiars

Following the Church's formal condemnation of cats, it was not long before felines were regularly associated with witches, usually marginalized female figures that had run afoul of the Church or their presiding local government. Officially, the Witchcraft Act was passed in 1542 in England, and by 1580, 13% of all criminal hearings involved some charge of witchcraft.

Though not the sole animal identified as a familiar, a sort of non-human companion used to inflict evil by witches or the shape a witch could take at will, in ways, cats were ideally suited for the role. Not only did a cat's nature — solitary hunters largely indifferent to the comings and goings of humans — speak to a congress with the Devil, but the behavior of a cat's human companion could also suggest supernatural leanings. Add to that the symptoms of a cat allergy — wheezing, sneezing, watering eyes — and it is no wonder cats were held as the consorts of witches for so long.

Romanticized Fantasy Cats, Still Evil

As the fear of witches waned in the 18th century, the relationship between humans and cats began to improve. Poets, writers and authors began to embrace the cat as emblems of non-conformity, mystery, and eroticism. The very characteristics that associated cats with evil in the centuries before were now depicted positively, and by the 19th century, cats were kept as cherished pets, though still regarded with hostility by many. ●

“Those who'll play with cats must expect to be scratched.”

MIGUEL DE CERVANTES // Spanish writer

● Edited for space and clarity

MATHEMATICS

Sudoku

#243 PUZZLE NO. 6708976

		8	9					4
	1	2	6			3		
4			3		1			9
					3			
				5	4	7		3
	6	3						2
	8		1					
5					6			9
6								

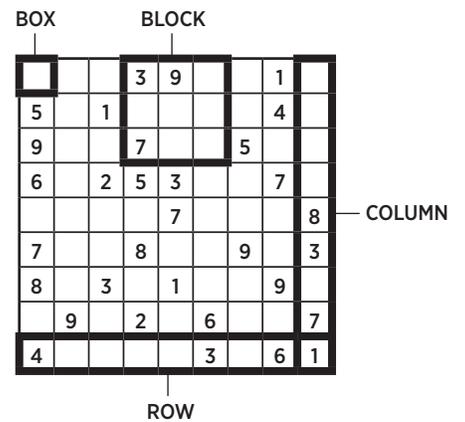
#244 PUZZLE NO. 4240069

							1	2
3		4	2			7		
	1	6		8				
					2	8		
		9	5					4
1			3	4			7	
					9	5		
			7				6	
	4						8	3

©Sudoku.cool

SUDOKU HOW-TO GUIDE

1. Each block, row, and column must contain the numbers 1-9.
2. Sudoku is a game of logic and reasoning, so you should not need to guess.
3. Don't repeat numbers within each block, row, or column.
4. Use the process of elimination to figure out the correct placement of numbers in each box.
5. The answers appear on the last page of this newsletter.



What the example will look like solved

2	4	8	3	9	5	7	1	6
5	7	1	6	2	8	3	4	9
9	3	6	7	4	1	5	8	2
6	8	2	5	3	9	1	7	4
3	5	9	1	7	4	6	2	8
7	1	4	8	6	2	9	5	3
8	6	3	4	1	7	2	9	5
1	9	5	2	8	6	4	3	7
4	2	7	9	5	3	8	6	1



“Cats do this thing with their faces where they’re so still, but they have this almost magnetic connection to anything they’re observing.”

EMMA CORRIN // English Actress



DID YOU KNOW?

A house cat's genome, or DNA, is **95.6% tiger**, and they share many behaviors with their jungle ancestors.

Cats can **jump up** to six times their length.

Cats have **whiskers** on the back of their front legs.

Cats have up to **100 different vocalizations** while dogs only have ten.

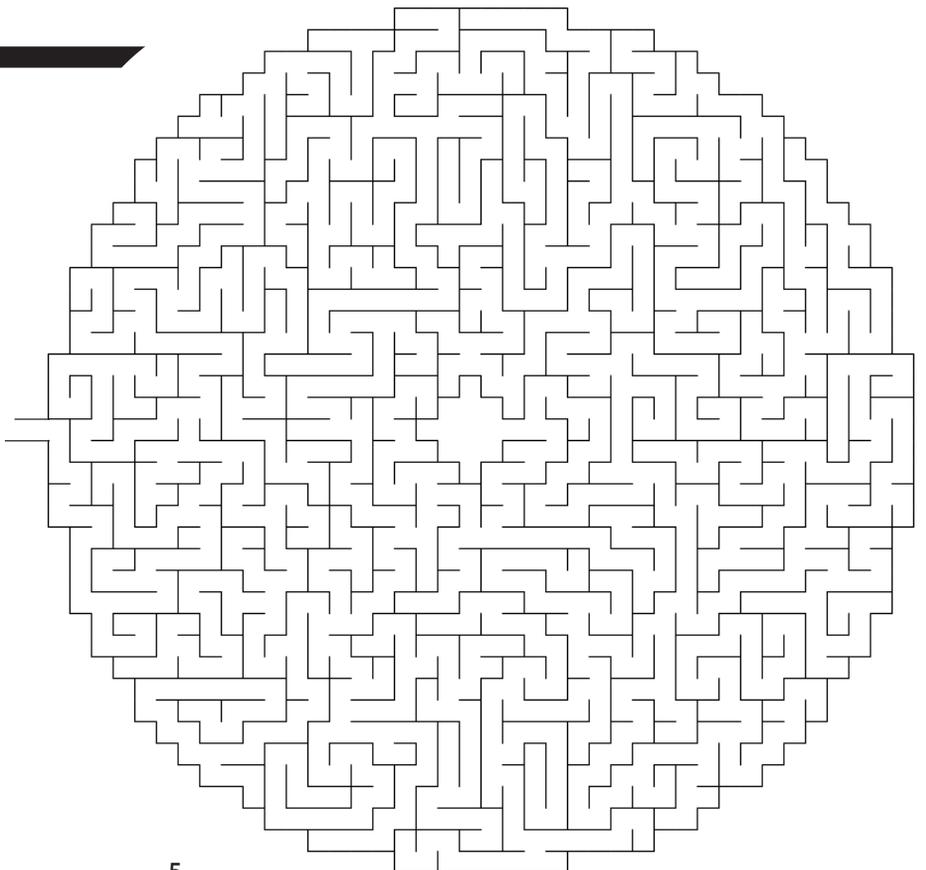
Cats may **yawn** as a way to end a confrontation with another animal.

Meowing is a behavior cats developed exclusively to communicate with people.

Source: <https://civilcatcare.com/veterinary-topics/>

Maze ►

This maze is a collection of paths, where there is both a start and ending point. The player starts from the start point and follows a path of their choice, which leads to the end point.



CATS REALLY DISLIKE CITRUS SCENTS



CATS ARE BELIEVED TO BE THE ONLY MAMMALS WHO DON'T TASTE SWEETNESS.

ART + CULTURE

The Cats Will Know

BY CESARE PAVESE | TRANSLATED BY GEOFFREY BROCK

Rain will fall again
on your smooth pavement,
a light rain like a breath or a step.
The breeze and the dawn
will flourish again when you return,
as if beneath your step.
Between flowers and sills
the cats will know.

There will be other days,
there will be other voices.
You will smile alone.
The cats will know.
You will hear words
old and spent and useless
like costumes left over from yesterday's parties.

You too will make gestures.
You will answer with words—
face of springtime,
you too will make gestures.

The cats will know,
face of springtime;
and the light rain
and the hyacinth dawn
that wrench the heart of him
who hopes no more for you—
they are the sad smile
you smile by yourself.

There will be other days,
other voices and renewals.
Face of springtime,
we will suffer at daybreak.

Cesare Pavese, 1908 – 1950, was an Italian novelist, poet, short story writer, translator, literary critic, and essayist. He was born in a small town in which his father, an official, owned property. Denied an outlet for his creative powers by Fascist control of literature, Pavese translated many 20th-century American writers in the 1930s and '40s. His work probably did more to foster the reading and appreciation of U.S. writers in Italy than that of any other single man.

WRITING PROMPT

This poem speaks in three different time periods; one of hoping, one of waiting, and the last of despair. And only the cats bear witness. Using this piece as inspiration, write or create a poem, small essay or story, blog, or illustration that captures different time periods and maybe of a cat or other animal or creature who is present.

Word Search

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

- | | | | |
|----------|----------|---------|------------|
| PAVEMENT | FLOURISH | GESTURE | SPRINGTIME |
| ACHING | DAYBREAK | HOPE | RENEWAL |
| SLUMBER | BREEZE | SUFFER | YESTERDAY |

PROGRAMS

Cats in Prison | *Do Prisons Allow Persons Inside to Have Cats?*

FROM PRISON ROSTER

There are many different programs designed to help persons living in prisons lead more fulfilling lives. Many prisons have some type of animal care program where people can care for, train, or even “adopt” a pet. But most of these programs involve dogs or smaller pets, like hamsters and birds.

Some prisons do allow cats in some sort of cat program for persons living inside. However, there is no concrete answer to this question. It honestly just depends on the prison, its rules, and the types of programs it has in place.

So, while some prisons do allow cats through some type of cat program, others do not. Cat programs, for some reason, are simply not as common as dog programs. However, there seem to be more and more cat prison programs popping up across the United States and around the world, so it’s possible that we’ll see more of these in the future.

The Benefits of a Cat Program in Prison | Why a cat program in prisons? Like other types of animal programs, a cat program can give persons inside responsibilities that they otherwise wouldn’t have had. Through these responsibilities, they can learn to care for another living thing and gain a sense of pride and accomplishment.

Cats can give people something to connect with and love on a deep level. Overall, individuals might notice reduced stress and anxiety levels and more even moods from their relationships with cats in a prison program.

Plus, cats get to find homes and people to love! The cats in prison programs are typically ones who don’t have consistent homes to go to. They’re usually waiting to be adopted or fostered. Being included in the program allows them to feel the love and affection they crave, too.

How Cat Programs in Prisons Work | Prison programs involving cats may look different in each facility, depending on the type of program offered. Generally, these programs are from an agency, like a cat adoption agency or shelter, that lends cats to persons inside to care for.

However, some prisons have their own programs through a partnership with a local shelter or adoption

agency. Prisons with in-facility programs might be able to house cats within their facilities for individuals to visit, provide basic health services for, and take care of. Some prisons also have training programs in which people can learn from cat trainers how to train the cats in their programs. Other prisons have actual adoption agencies for individuals to adopt cats to love within their facility.



Bang Kwang Central Prison’s Cat Program | Bang Kwang Central Prison in Thailand reportedly has one of the oldest cat programs in any prison around the world.

The cats live inside the prison, and the prison’s staff allows its persons inside to adopt a cat.

The Indiana State Prison Cats Program | One of the most notable prison cat programs is from the Indiana State Prison. This prison is made up of male individuals and has a high population on death row. The cats began coming into the prison many years ago without actually being invited. However, the prison eventually began allowing them to stay.

What started as an accident led to the prison’s adoption program that allows people inside to adopt a cat by applying for one, just like they would in the real world. Each cat has a name and ID badge so that the prison always knows who it belongs to.

Monroe Correctional Complex | Purrfect Pals began a partnership with Monroe Correctional Complex in Washington state to provide foster care for its cats through the prison. The program has been around since 2006, and it seeks to give foster cats and kittens some love and affection while they’re waiting on their forever home.

Of course, persons inside also benefit from caring for the cats, showing them love, and gaining new responsibilities and caregiving skills. Purrfect Pals notes that, since beginning the program, participating individuals have built up their self-esteem and gained motivation to reach their goals. ●



“I used to love dogs until I discovered cats.”

NAFISA JOSEPH // Indian model

Edited for space and inclusivity

12"	1'	RIDINGesroh	THINGS Things Things
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WORD PLAY A Rebus puzzle is a picture representation of a common word or phrase. How the letters/images appear within each box will give you clues to the answer! For example, if you saw the letters “LOOK ULEAP,” you could guess that the phrase is “Look before you leap.” *Answers are on the last page!*

FEATURE

What Do Cats Think About Us? You May Be Surprised

BY CHRISTINE DELL'AMORE | *National Geographic* | January 28, 2014

Since cats first got their adorable claws into us about 9,500 years ago, humans have had a love affair with felines.

Today more than 80 million cats reside in U.S. homes, with an estimated three cats for every dog on the planet. Yet there's still a lot we don't know about our feline friends — including what they think of their owners.

John Bradshaw is a cat-behavior expert at the University of Bristol and the author of the new book *Cat Sense*. After observing pet cats for several years, he's come to an intriguing conclusion: They don't really understand us the way dogs do.

Bradshaw recently shared some of his insights with *National Geographic*.

How did you get into cat behavior? “For the first 20 years of my career I studied olfactory [smell] behavior in invertebrates. I've always been fascinated by this other world that animals live in—primarily of odor, which is dogs' primary sense. So in the early 1980s I started working on dog behavior. [Later] I very quickly became fascinated with cats, and what their idea of the world is compared to the one we have.”

What do you do in your research? “A lot of observation — watching groups of cats to see how they interact with one another and deducing their social structure. [I watch] cats in colonies that are free-ranging, and in animal shelters where quite a number will be housed together — you get interesting dynamics [when new cats are introduced].”

“I've also done slightly more manipulative things, such as studying the way cats play with toys, or testing cat [behaviors] at different times of the day. [I also observe] relationships with owners, interviewing them and giving them questionnaires to find out how they perceive their cats.”

Why did you conclude that cats don't “get us” the way dogs do? “There's been a lot of research with dogs and how dogs interact with people. [It's] become very clear that dogs perceive us as being different than themselves: As soon as they see a human, they change their behavior. The way a dog plays with a human is completely different from [the way it plays] with a dog.”

“We've yet to discover anything about cat behavior that suggests they have a separate box they put us



Domestic cats like this one may not really understand people.

Photograph by
Fstop, Alamy

in when they're socializing with us. They obviously know we're bigger than them, but they don't seem to have adapted their social behavior much. Putting their tails up in the air, rubbing around our legs, and sitting beside us and grooming us are exactly what cats do to each other.”

I've read articles where you've said cats think of us as big, stupid cats. Is that accurate?

“No. In the book [I say] that cats behave toward us in a way that's indistinguishable from [how] they would act toward other cats. They do think we're clumsy: Not many cats trip over people, but we trip over cats.”

“But I don't think they think of us as being dumb and stupid, since cats don't rub on another cat that's inferior to them.”

Can we discover what cats really think about us? “More research needs to be done. [It's] not an area that's received sufficient attention. [Cats are] not wild animals, so ecologists [might think], ‘Well they're not really animals at all.’”

What has been most surprising to you in your research? “How stressed a lot of pet cats can be without their owners realizing it, and how much it affects the quality of their mental lives and their health. Cats don't [always] get on with other cats, [and people don't realize] how much that can stress them out. Other than routine visits, the most common reason cats are taken to vets is because of a wound sustained in a fight with another cat.”

“[More cats are mysteriously getting] dermatitis and cystitis [inflammation of the bladder] and it's

“While cats can be infuriating, little old women in fur coats, they make me laugh. Of course, dogs, horses, and my highly social chickens are dear to me, too.”

RITA MAE BROWN
// American
Feminist Writer

becoming abundantly clear that these medical problems are made worse by psychological stress. [For instance], inflammation of the bladder wall is linked to stress hormones in the blood.”

“One solution is to examine the cat’s social lifestyle, instead of pumping it full of drugs. [For example, that could mean making sure] two cats that [don’t get along] live at opposite ends of the house. Quite often the whole problem goes away.”

I have a few questions from cat owners on Facebook. First, why might a cat yowl when it’s by itself in a room? Cats learn specifically how their owners react when they make particular noises. So if the cat thinks, ‘I want to get my owner from the other room,’ it works to vocalize. They use straightforward learning.”

Why do some cats treat one human member of the household differently? “They’re much smarter than we give them credit for: They learn what works with what person. They know if [one member of the family] is prone to get up at 4 a.m. and give them some treats.”

Why do cats knead us? “They are using behavior that they would use toward their mother — all the behavior they show toward us is derived in some way from the mother-kitten relationship. The kitten learns to raise its tail, rub on its mother, and knead and purr. Grooming is what mothers do back to kittens.”

“So they’re using bits of behavior already in their repertoire to communicate with us. There aren’t very many behaviors — maybe half a dozen.”

Can cats be trained? “Yes. Cats can learn what they’re not supposed to do. If a cat has developed a habit [of jumping up on the kitchen table], there are limited ways to prevent it.”

“A spring-loaded toy could be used, so when a cat jumps up on something, the toy goes bang and up in the air — the cat doesn’t like that and jumps down. Another reasonably benign [strategy] is to use a child’s water pistol. But the cat can’t know who has it. Cats don’t forgive, and once they realize a person is causing them anxiety or hurt, they keep away.”

What do you want people to know about cats? “Acknowledge that cats are sociable animals to a point, but not sociable to the

extent that dogs are. A lot of people who have one cat decide they would like to have another cat, thinking two cats are twice as much fun. But the cats may not see it that way.” ●

🔗 Edited for space and clarity



RANDOM-NEST

4 Types of Teeth and Their Functions

BY AMANDA BRINEY | INFORMATION TAKEN FROM THOUGHTCO | 2020

1. INCISORS Incisors are the four most middle teeth on both the top and bottom jaws. Incisors take the first bites into food and help support the lips as well.

There are two types of incisors — central incisors and lateral incisors.

Central incisors | Central incisors can be found in the front part of your jaws and are involved in pronouncing consonants. The top row of central incisors are shaped like shovels and are the most prominent feature of your smile.

The bottom central incisors have a single root. Their main function is to help to chew food in mastication.

Lateral incisors | The small teeth between your central incisors and your canines are known as your lateral incisors. Lateral incisors have a single root, and they tend to be small and thin.

Lateral incisors play a crucial role in digestion, as they help to divide food into smaller pieces during mastication.

2. CANINES The second type of teeth is canine. The term “canine” conjures up the image of a friendly doggo with canines. This is likely due to the shape of canines, which are pointy on the tip. The uppermost peak of the canine is known as the “cusp.”

Canines are the strongest type of all four types of teeth and are highly resistant to the tremendous pressure caused by chewing.

3. PREMOLARS Just behind your canines are your premolars. Premolars have two cusps. They are flat on top and are used to, surprise, surprise, chew food. Specifically, premolars tear and grind food into smaller pieces when chewing.

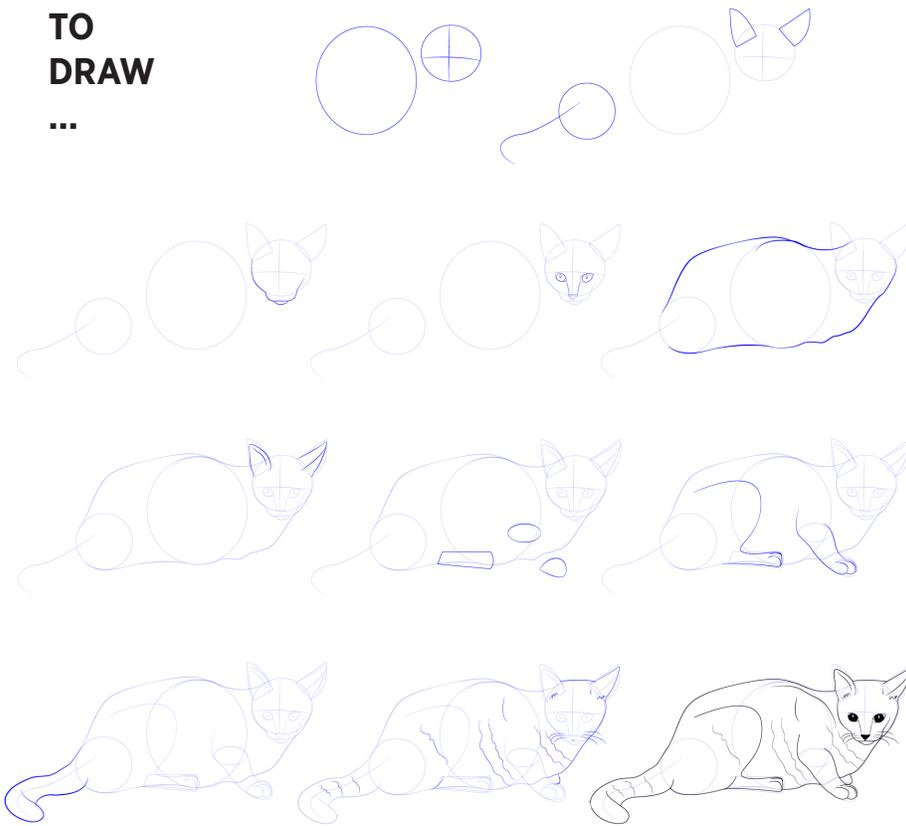
4. MOLARS Your molars are next to your premolars. They are your widest, flattest teeth and are the strongest, most powerful teeth. molars cluster into four groups of three at the back of your mouth.

Third Molars — Your Wisdom Tooth | Wisdom teeth, also known as third molars, are the last to erupt and usually do so in young adulthood. If the wisdom tooth erupts straight out, they do not need to be removed.

However, these wisdom teeth do not always grow out as desired. When they do not erupt properly, wisdom teeth can cause pain and infection, and even decay to the molar in front of it. This is when the removal of these wisdom teeth becomes necessary.

HOW TO DRAW

...



drawingtutorials101.com



WORDS OF ENCOURAGEMENT

Hello there friends! We hope you enjoyed this week's edition of *The Warbler*!! Cats are some of the most amazing creatures ever! I love their attitudes and the way they don't really care what anyone thinks. Cats are definitely not for everyone, but for some they are the perfect pet. This article brought us so much information and hopefully it peaked your interest a little.

We are always interested in finding ways to offer you support and engage. FICGN (Formerly Incarcerated College Graduate Network) is an organization that supports persons who have been or are incarcerated and are involved or looking to get involved in post-secondary (college) education. They offer access to jobs, job fairs, and educational resources. Their current address is 600 Park Offices Drive Ste 300 #54, Durham, NC 27709. Feel free to reach out to them with any questions or concerns you might be having and please allow for time in a response.

Please continue sending us your suggestions and questions, we are always looking for new topics to cover. Please feel free to write to us at the address listed below or pass on anything through your instructors. We hope you have a peaceful week!!

Tammy and the APAEP Team

Answers

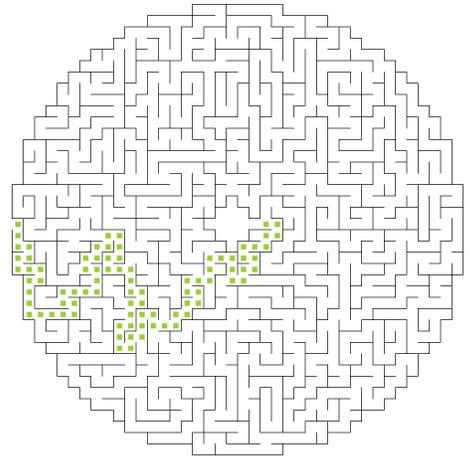
SUDOKU #243

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7	4	5	2	6	3	9	8	1
1	2	9	8	5	4	7	6	3
8	6	3	7	1	9	4	2	5
2	8	4	1	9	7	5	3	6
5	3	1	4	2	6	8	9	7
6	9	7	5	3	8	1	4	2

SUDOKU #244

7	9	8	4	5	3	6	1	2
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4	7	3	6	9	2	8	5	1
8	6	9	5	7	1	3	2	4
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6	3	1	8	2	9	5	4	7
5	8	2	7	3	4	1	6	9
9	4	7	1	6	5	2	8	3

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Rebus Puzzle

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1. One foot before the other
2. Horseback riding
3. Moving up to bigger and better things

UNTIL NEXT TIME 