Studio Tour Activity Book

Welcome to KTEH, public television for Silicon Valley and the Central Coast. For more than forty years, KTEH has been a bright, steady source of inspiration that values education, integrity, and fresh ideas. Through our exceptional programming schedule and community outreach efforts, we seek to enrich lives, encourage idealism, and open minds.

KTEH's first broadcast on 19 October 1964, with W. Lindy Wade (coordinator of instructional television) Dr. C.R. Timpany (Superintendant of schools) and Ralph Hammer (Associate Superintendant) watching.

Service to its community is at the heart of KTEH's mission. Our outreach campaigns combine educational programs, productions and activities to address community concerns. KTEH partners with community groups with similar missions to create outreach campaigns, which address school readiness for young children, parenting issues, environmental awareness, drug and alcohol abuse, reading, and much more.

KTEH relies on membership support to produce and broadcast extraordinary programs of excellence and distinction. Your support also helps us provide a variety of services which help to improve the school readiness of young children. Nearly 55 percent of our operating budget comes from viewers like you and we are very grateful for your support!

Thanks for Visiting,

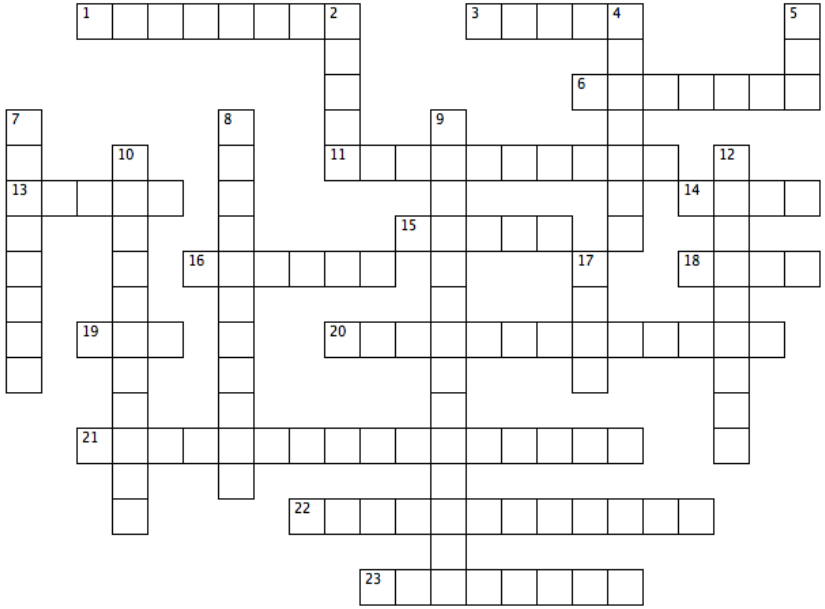
Becca King Reed

NCPB KQED KTEH KQET KQEI
Northern California Public Broadcasting
PUBLIC TELEVISION
PUBLIC RADIO
INTERACTIVE
EDUCATION NETWORK

Since 1969, Sesame Street has been a integral part of the Public Broadcasting children's schedule, and one of the icons of children's television around the world.

Watch Sesame Street on KTEH Sunday through Friday at 8 AM.

KTEH - Brilliantly British



ACROSS

1 Ian McShane's US TV hit.
3 Julia Sawalha played the put-upon daughter in the hit comedy (abbr.)
6 *4 Weddings and a Funeral* and *Vicar of Dibley* writer _____ Curtis
11 Stphen Fry keeps '*House*' for his master.
13 Dawn French's *Dibley* occupation.
14 The Fab ___
15 Jonathan's river
16 The British Cold Case, _____ *the Dead*
18 Your favorite place for British shows.
19 *Kingdom* star Stephen ___.
20 Betty Slocombe and Captain Peacock's workplace.
22 *Casablanca* song.
23 Gardening detective _____ *& Thyme*

DOWN

2 Dame Judi _____
4 Brilliantly _____
5 *Waiting for* ___
7 The British _____
8 Hyacinth Bucket climbs up the social ladder in *Keeping Up* _____
9 Speaker of "It's elementary"
10 Monday classic drama.
12 He trravels via a police box
17 Jolly ____

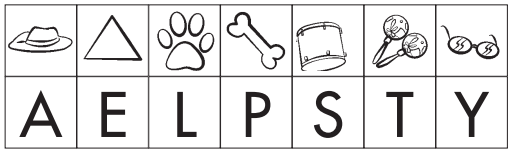
KTEH has been airing British programming for over three decades, and recently expanded it's Anglo offerings with the Brilliantly British schedule all week long. Tune in nightly for some jolly good programmes!

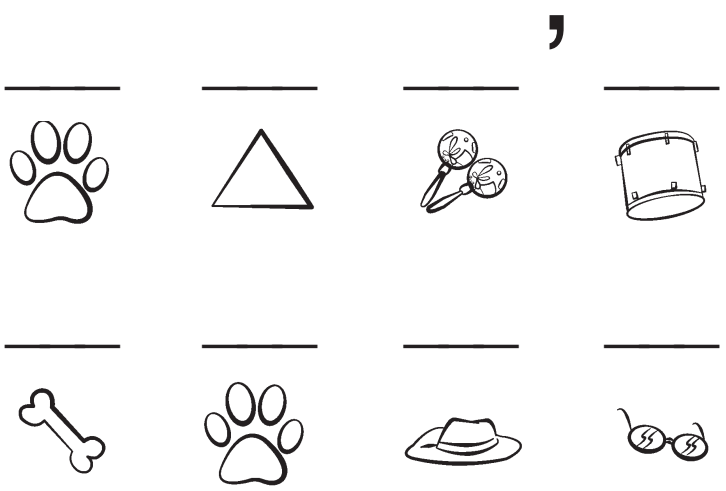
Raggs®

www.Raggs.com

A RAGGS CONCERT CODE

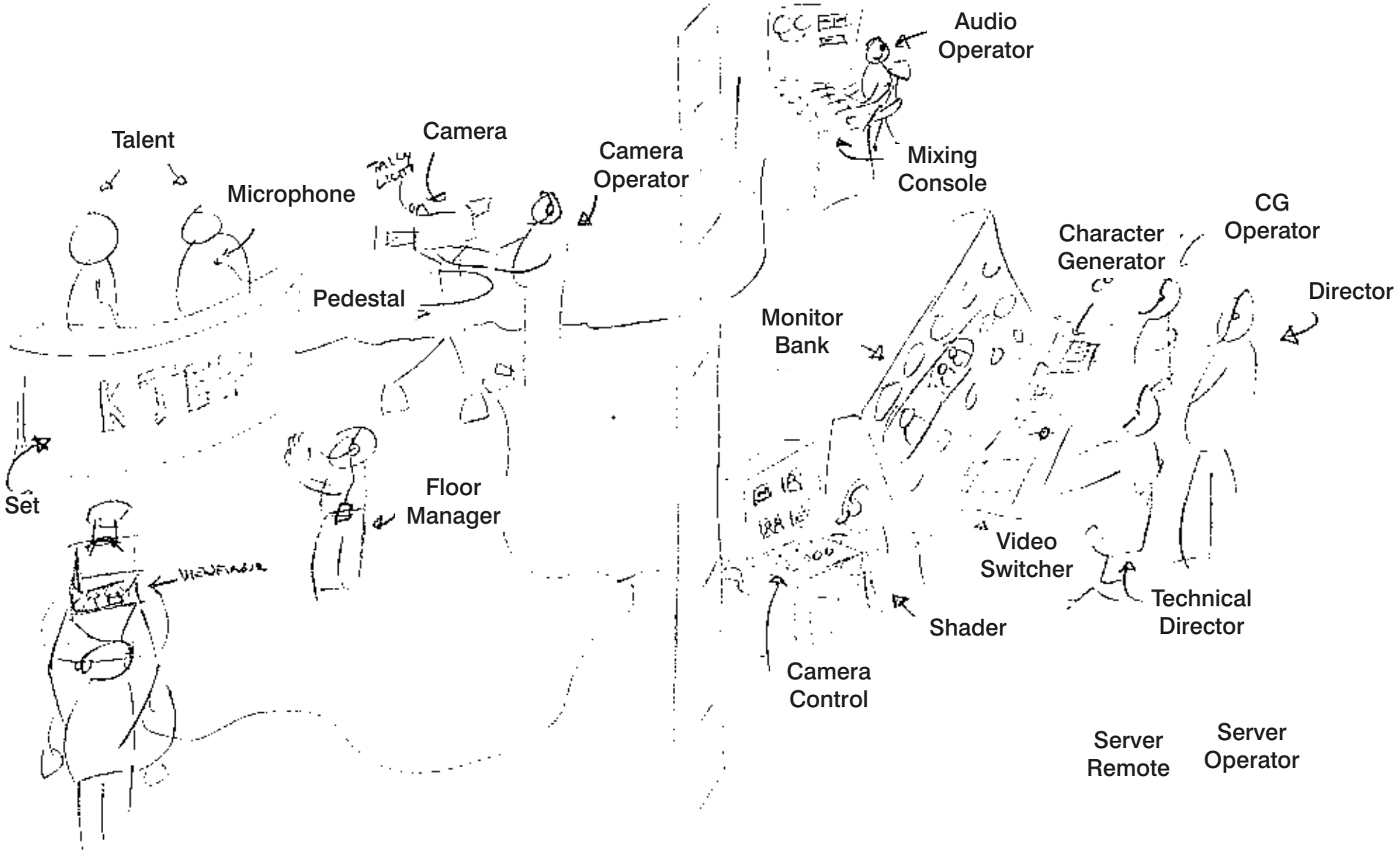
Can you crack the code and get ready to rock?





Raggs stars five colorful canine characters and their wise-cracking pet cat, Dumpster, who hang together in their own colorful clubhouse. However, Raggs and his friends are not your average canines – they're also talented musicians and together make great rock 'n' roll music as the Raggs Band.

Catch Raggs Weekdays at 9 AM and 1:30 PM
and weekends at 7:30 AM



People and things in a television studio

People and things in a television studio

Use the lables on the previous page to find the words...

remicrophoneoloret
areganamrool frrete
crcpmsdamioeoogoan
tiedepii tottotbevi
hanerdraeaal rcoptm
arotarepo rev reseoi
romecccseeroerkrrx
soctortptmtoeintai
ortoneoecaotmdapvn
cxratartrclellbrrg
rotarenegretcarahc
ereeoeptdcoeocodao
enmclopotanmiitlln
eacaoedoirhornioas
crtiaourgtnschnoeo
videoswitcherorol
vutcstserverremote
armstaincleateoro

Archimedes' Recipe for Pi

One of Archimedes' many mathematical accomplishments was his computation of pi, which is the ratio of the circumference of a circle to its diameter. In this activity, you will duplicate the method he used to arrive at his estimate.

Procedure

1 Construct a data table on a sep rate piece of paper that contains the headings shown in the table below.

2 Use your compass to draw three circles on another piece of paper. Each circle can be a different size, but each should be at least 2.4 inches (6 centimeters) across.

3 Use a ruler to divide one circle into four equal pie-shape pieces. Be sure to extend your lines outside the circle. Then, using the ruler, create a square by drawing straight lines inside the circle to connect the points where the lines meet the circle.

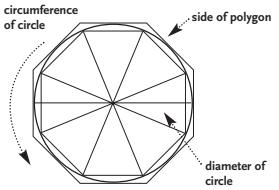
4 Connect the lines around the outside of the circle to create a second square that just touches the circle's outside edge. Make sure that the straight line for each segment touches the circle at the segment's halfway point.

5 Measure one side of the inside square. Multiply that length by the number of sides in the square (four) to find the perimeter of the inside square. Record your results in the table. Repeat the process for the outside square.

6 Use the ruler to find the diameter of the circle and record this measurement.

7 The perimeters of the squares give approximate values for the circumference of the circle. Determine the value of pi by dividing the length of each perimeter by the diameter of the circle. Record your results for both the inside and outside squares.

8 Repeat the process for the second circle, using octagons (eight-sided polygons) instead of squares. Make eight equal pie-shape pieces. Then



repeat the process again for the third circle, using hexadecagons (16-sided polygons).

Questions

Write your answers on a separate piece of paper.

1 The actual value of pi to four decimal places is 3.1415. Compare the range of values you found for each set of polygons to this number. Do all three ranges include the actual value of pi? Which type of polygon gave the most accurate range of values?

2 Archimedes calculated the value of pi for polygons containing 96 sides. Do you think his calculations were more or less accurate than yours? Explain.

Polygon Name	# of Sides	Length of Side (in cm)		Perimeter of Polygon (= number of sides x length of 1 side)		Diameter of Circle (in cm)	Value of Pi (=perimeter/diameter)	
		inside polygon	outside polygon	inside polygon	outside polygon		inside polygon	outside polygon
Square	4							
Octagon	8							
Hexadecagon	16							

Train Your Brain

Can you train your brain to ignore something? Today's challenge—called a Stroop test—plays a little trick on you. But maybe you're too quick for the trick!

Get what you need.
• 2 blank 4x4 grids (to make a grid, copy Figure 1)
• Crayons, pens, or markers—at least four different colors • Ruler • Stopwatch or clock

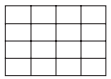


Figure 1. To make a grid, draw 16 boxes on a piece of paper.

Part 1: The words match the colors

1. **Fill in one grid.** Choose a marker. Use it to write the name of its color in one of the grid boxes. For example, if you chose a red marker, you'd write the word *RED* in one of the boxes. Fill in the grid this way, using at least four different colors.
2. **Play the game.** Have one person be the Timer and one be the Reader. When the Timer says, "Go," the Reader reads the word in each box out loud. If you make a mistake, read the word again correctly. On the chart below, record how many seconds it takes the Reader to read the 16 words correctly.
3. **Play again.** Switch roles. Repeat Step 2.

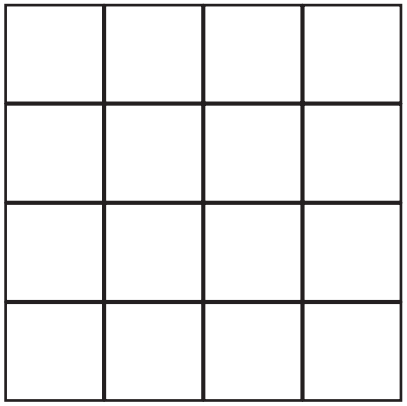
	Reader 1	Reader 2
Time in Part 1		
Prediction for Part 2		
Time in Part 2		

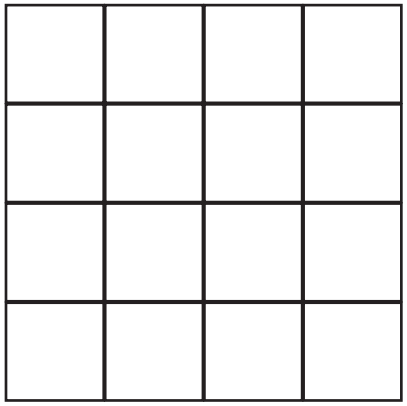
Part 2: Words don't match the colors

4. **Fill in the other grid.** Now, write the name of a color that's *different* from the ink color. So, if you chose a red marker, you'd write *BLUE*, *GREEN*, or *YELLOW*, etc. in a box. Fill in the grid this way, using at least four different colors.
5. **Make a prediction.** How long will it take you to name the ink colors instead of reading the words? Write your prediction in the table below.
6. **Play again.** Play as in Step 2. But this time, the Reader says the *color of the ink* used in each box. For example, if you wrote the word *BLUE* using a red marker, you'd say "RED." Record how long it takes the Reader to say all 16 *colors* correctly. Switch roles and play again.

Chew on This

In Part 2, your brain got two signals from your eyes—the words and the ink color. Reading is very automatic for most people. But naming a color isn't. To name the color, your mind has to ignore its first reaction—what a word says. But ignoring something can take real mental effort! In fact, when you do something that takes a lot of concentration—like a Stroop test, your brain can get tired. This makes it hard to stay focused. Want to do better? Scientists say giving yourself a break before trying again helps. Taking a quick walk outside is a good way to rest the parts of the brain you use for concentrating.





Fetch! with Ruff Ruffman, is a reality based game show hosted by the loveable canine host Ruff Ruffman. Kids compete by completeing a variety of tasks that are assigned to them. The one with the most points wins!

Fetch! sets the cahllenge, Monday - Thursdays at 3:30 PM

WordGirl has a message for you! And she has left you lots of clues!

Start by filling in the letters in the blank message that are provided in the table. For example, "A" = 9. For each "9" in the message, put an "A" in the blank above.

Some letters will be missing and you will have to use your vocabulary and detective skills to solve the puzzle and read the message from WordGirl. Extra Hint: The letters

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
9			20	26			17	25			19		1	2	14		24	16	18		5				22

21 2 24 20 7 25 24 19 16 2 19 5 26 16 9 19 19

2 13 17 26 24 16 19 25 14 14 26 24 8

14 24 26 20 25 23 9 4 26 1 18 16 21 25 18 17

17 26 24 20 9 22 22 19 25 1 7

5 2 23 9 11 15 19 9 24 8 !

Now use the same code to make a new cryptogram message for your friends!

Wordgirl is a superheroine from the planet Lexicon. She uses her superior vocabulary skills to fend off villains such as Granny May, The Butcher, Chuck the Evil Sandwich Making Guy and Dr. Two-Brains.

Wordgirl saves the day, weekdays at 4 PM

KTEH is a service of Northern California Public Broadcasting.

Puzzle solutions can be found at www.kteh.org/[tba]