

GARFIELD



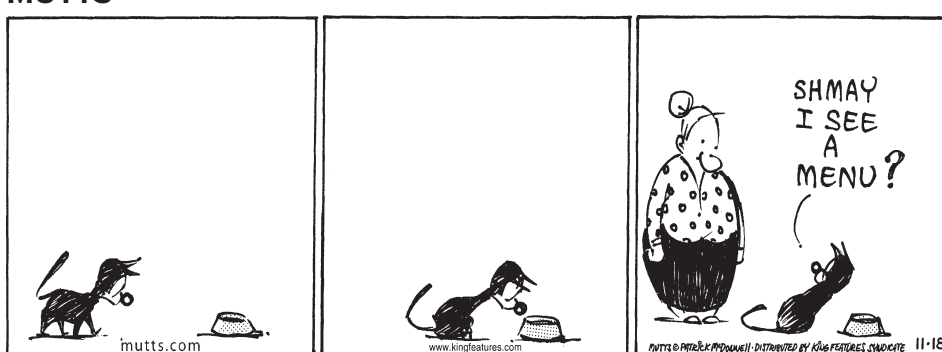
ROSE IS ROSE



FRANK & ERNEST



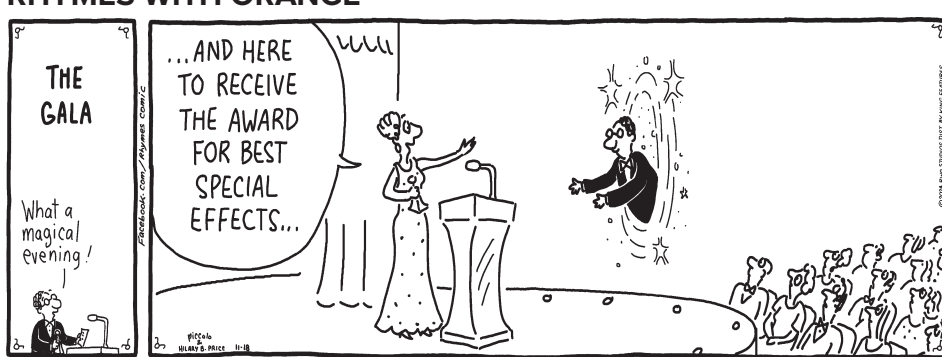
MUTTS



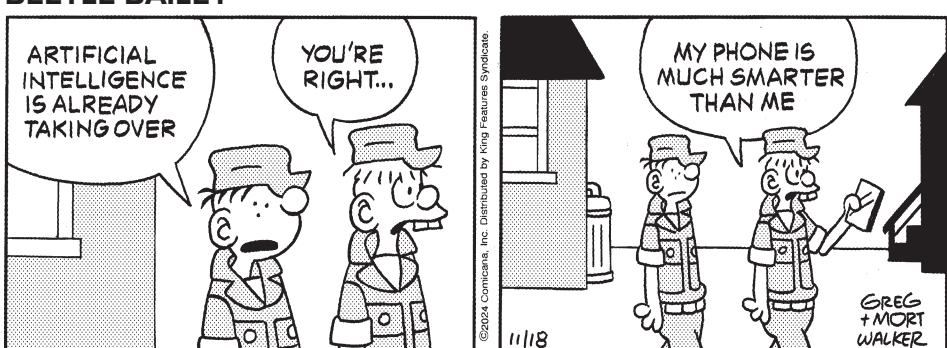
THE GRIZZWELLS



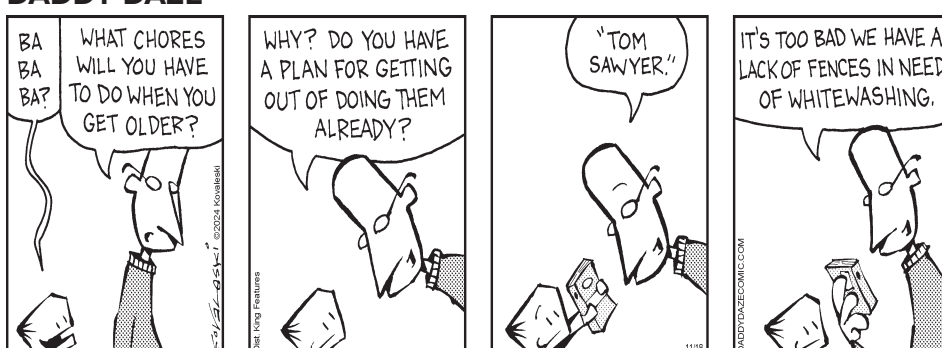
RHYMES WITH ORANGE



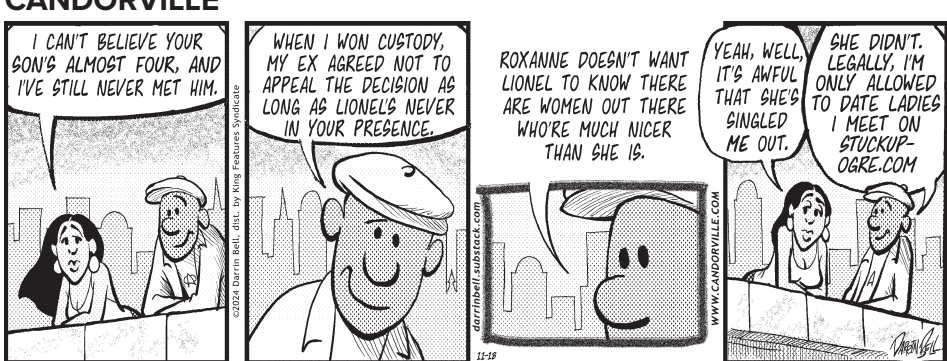
BEETLE BAILEY



DADDY DAZE



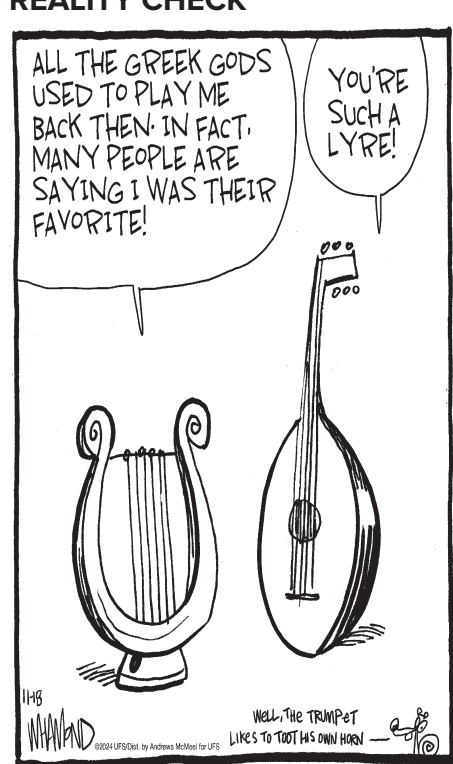
CANDORVILLE



MODERATELY CONFUSED



REALITY CHECK



THE BORN LOSER



Less than 100 years ago, if you contracted pneumonia, rheumatic fever or scarlet fever, there was little doctors could do except wait and hope that you would get better. The introduction of penicillin in the 1940s led to a revolution in medicine that gave doctors new ways to help us live longer and healthier lives.

This cartoon is not what the doctor ordered.

Shortcuts

A Dose Of

Penicillin

by jeff harris

This edition of Shortcuts is sponsored by Pill Nye, the Science Fungi.

Science each day keeps the doctor away.

How Does Penicillin Work?

Bacteria are protected by a tough protective layer called a "cell wall." Bacteria are constantly rebuilding this protective layer. Penicillin kills bacteria by damaging or inhibiting the growth of these cell walls. Penicillin and other antibiotics do not work against diseases caused by viruses, such as the flu and the common cold.

Same Mold Thing

As early as 2,500 years ago, the ancient Egyptians treated infected wounds by rubbing them with a lotion made from moldy bread.

The antibiotic effects of certain molds were first documented by Ernest Duchesne of France in the late 1800s.

The 1945 Nobel Prize in Medicine was awarded to Alexander Fleming, Howard Florey and Ernst Chain for their work with penicillin.

Word Search

Can you find the hidden words? Search carefully because some words are backward or diagonal.

ANTIBIOTIC CURE COLD
PENICILLIN INFECT WALL
BACTERIA GROW BOB
DOCTOR FEVER DISH
FLEMING VIRUS CELL
SCARLET MOLD FLU
CHIPMONK CHEEK
HIGHER EISTARS
AFTWEEN ENIDUE
OLDOORS BRFRCT
DEMIRCOEEIEAR
SMOGBOITVVOYCO
NILLCBINEPLUT
ENDWALLTFALLC
AGEBHSIDNFEE
ABOUTTELRACS

Penicillin was discovered in 1928 by Alexander Fleming of England. Fleming noticed that a bit of mold growing in a petri dish had destroyed the bacteria surrounding it.

How do you describe mold hanging out at the beach? Peni-chillin'.

Why did everyone like the penicillin mold? Because he is a fungi (fun guy).

What does penicillin call his mother's sister? Auntie Biotic.

Penicillin was often called the "wonder drug" because it cured many bacterial diseases that were once fatal.

More and more bacteria are showing a resistance to antibiotics. This is a growing concern for doctors around the world.

Penicillin is a type of "antibiotic." An antibiotic is a substance that kills or inhibits the growth of harmful microbes without harming most human cells.

How do bacteria communicate with each other? With cell phones.

In the early 1940s, scientists in the U.S. searched all over the world looking for a strain of mold that could quickly produce large amounts of penicillin. The best strain they could find was discovered on a moldy cantaloupe from a market in Peoria, Illinois.

GAME ANSWERS: 1. Teeth are different. 2. Lip is smaller. 3. Nose is smaller. 4. Eyes are moved. 5. Pill is smaller. 6. Eyes are moved. 7. Mouth is smaller. 8. Eyes are moved. 9. Mouth is smaller. 10. Eyes are moved.

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