Technically intriguing items from TRW, guaranteed to add luster to your conversation and amaze your friends.

How the Days Got Their Names — On Thursday, March 2, our Pioneer 10 spacecraft left for Jupiter, the first of the outermost planets. Although Pioneer travels so fast it swept past the Moon's orbit in a mere 11 hours, the voyage to distant Jupiter (a half a billion miles away) will take two years.

Pioneer 10's departure took place on a peculiarly appropriate day. Thursday, it happens, is named after Jupiter. In fact, it we look back through astronomical history, we find that every day of the week is associated with an object in our solar system.

Early astronomers named the planets after gods and goddesses, and believed that each planet "ruled" or had primary influence on one day of the week. Jupiter, they held, ruled Thursday and so named the day Jove's day, or *jeudi* in the French*. Our Anglo-Saxon forebears replaced the Roman Jove with their equivalent deity, Thor. Hence we know it as Thor's day or Thursday.



THE NAMES OF THE DAYS COME FROM THE PROLOMEIC SYSTEM.

Here, for your information, is the complete planetary week. Woman's lib advocates will be pleased to note that we should thank a goddess it's Friday.

Day	Ruling Planet/ Divinity	Anglo-Saxon Equivalent
Monday	Moon	
Tuesday	Mars	Tiw
Wednesday	Mercury	Woden
Thursday	Jupiter	Thor
Friday	Venus	Freya
Saturday	Saturn	
Sunday	Sun	

^{*}Those of you familiar with the French will see the planet's names clearly in lundi, mardi, mercredi, jeudi, vendredi, and samedi.

Burn Coal (But Not Throats)! Must a high standard of living and low quality of life always go hand-in-hand? The argument for the case is as follows. A high standard of living requires the consumption of large amounts of energy (e.g., lights, air conditioners, cars, home appliances). In producing and using this energy, however, we pollute our environment. If the air you breathe is toxic or the water you drink causes you to retch, be happy; your discomfort is proof positive you have a high standard of living.

To add to this dilemma, our so-called clean sources of energy are dwindling fast. A logical replacement is coal, the Earth's most abundant fossil fuel. Yet coal is a major polluter. When burned, it produces sulfur dioxide, a gas noxious to lungs, eyes, and throats. In 1970, for example, the U.S. pumped around 28 million tons of sulfur dioxide into the air.

How can we burn the coal and make the electricity and light the lights and run the air conditioners without befouling our atmosphere? At TRW, our answer is to remove the sulfur from the coal *before* burning it. The result: clean coal and a clean environment.

Until we came upon the method, it was considered formidable to remove the sulfur content. Strong acids have little or no effect on the sulfur, most of which is locked up tightly in the iron pyrites or fool's gold molecule. Strong oxidizers dissolve the pyrites but also oxidize the coal, making it useless. Our method removes the sulfur without altering the coal matrix, and increases the heat content of the coal by cutting down on the ash content. As an added attraction, our oxidizing agent can be regenerated and recycled.

Right now, we're happy to report, the Environmental Protection Agency is supporting the development of the process to determine its effectiveness and assess its economic merit. If it lives up to specs, we'll all breathe easier.

For further information, write on your company letterhead to:



Attention: Marketing Communications, E2/9043 One Space Park Redondo Beach, California 90278





This Christmas

give your friends a window on the world of science . . .

SCIENCE NEWS will give them a greater awareness and understanding of scientific progress . . . tell them what science is doing, why it is important to them!

This Christmas, share SCIENCE NEWS with your friends. They will appreciate the opportunity to learn about new scientific developments and discoveries that can affect their lives, their jobs, their future. And in this day of changing social directions, they will especially appreciate the perspective SCIENCE NEWS gives to the issues involving science and society.

SCIENCE NEWS is the ideal gift for busy executives, professional people, scientists in search of an overview of all major fields of science, science teachers and students.

Why? Because it is planned for today's man-in-a-hurry. It reports key developments clearly . . . accurately . . . concisely—in about an hour's reading time a week.

For someone with no more than an hour to spare, SCIENCE NEWS is a reliable summary of important news. For the reader with more leisure, it is a guide to subjects he may want to pursue in more detail in other scientific journals.

SPECIAL CHRISTMAS SAVINGS!

Your first gift subscription to SCIENCE NEWS is \$10. Each additional one-year subscription is only \$8—and you may include your own renewal or new subscription at this money-saving rate.

SEND YOUR GIFT ORDERS NOW!

Fill in the order form at the right and mail it today.

SCIENCE NEWS

231 W. Center Street Marion, Ohio 43302
Please enter the following SCIENCE NEWS Christmas Gift Subscription:

ONE SUBSCRIPTION FOR \$10.

Na	me
	(Please Print)
Ad	dress
Cit	yStateZip
Eac	h Additional Subscription \$8 (Save \$2 each)
Na	me
	(Please Print)
Ad	dress
Cit	yStateZip
Na	me
	(Please Print)
Ad	dress
Cit	tyStateZip
	Y NAME AND ADDRESS AS DONOR IS:
Na	me
	(Please Print)
Ac	dress
Ci	tyZip
	(if more gifts are desired, use separate sheet)
Н	Send gift announcement card to recipients. Please enter or extend my SCIENCE NEWS subscription for one year at the lowest rate to which my total subscription order
	entitles me. I enclose \$ Please bill me.
NO Un	TE: Additional per year for subscriptions going outside the ited States: Canada and Mexico, \$2; all other, \$3. (CS-5)