

Contents

The menu bar

How rockets work

Notes for parents or teachers

What is PAYWARE

How PAYWARE works for you

Thrust

Weight

Drag

Payware sales info

Weight

Heavy rockets need more engine power or thrust to propel them. If two rockets have the same engine power and the same drag, the lighter one will fly highest.

Thrust

Is the amount of power a rocket engine has. The thrust pushes the rocket along. If you were given two rockets, both with the same weight and drag factors but each having a different thrust, the one with the most thrust would fly highest.

Drag

When a rocket flies through the air it needs to push that air out of its path. A thin, sharp rocket can cut through the air easily but a fat rocket with a round nose will not.

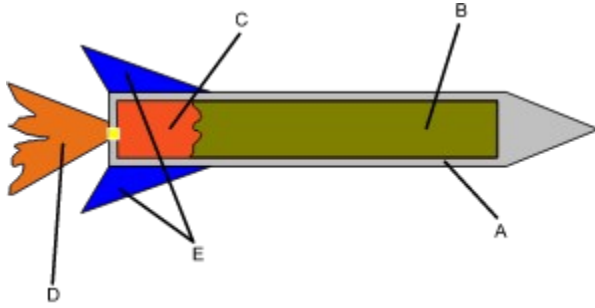
The force that the air places on a rocket is called drag. If you have two rockets, both with identical weight and thrust, the one with the least drag will fly best.

How rockets work.

Rockets come in two sorts, solid fuel rockets and liquid fuel rockets. Solid fuel rockets have one fuel container which holds a powdered or solid chemical mixture. This mixture will burn on its own and does not need to use air or oxygen in its combustion. Well known solid fuel rockets include fireworks, most modern toy or model rockets and the boosters on the Space Shuttle. Liquid fuel rockets have two tanks, one for the fuel and one for an oxidising agent. This oxidising agent is needed so that the rocket can work in space where there is no atmosphere .

In both cases the rocket motor burns the fuel in a combustion chamber to produce large amounts of very hot gas. This gas escapes from a nozzle under pressure blowing the rocket along in much the same way as a balloon is blown along when you release it without sealing the neck.

Solid fuel rocket



This cutaway drawing shows:

A..the rocket body

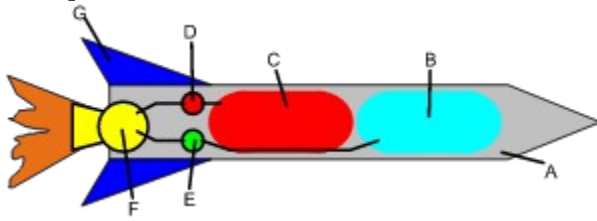
B..the solid fuel

C..solid fuel being burned to produce hot gas

D..the hot gas escaping from the rocket

E..the stabilising fins to make the rocket fly straight

Liquid fuel rocket



- A..Rocket body
- B..Oxidizing agent tank (liquid oxygen)
- C..Fuel tank (alcohol)
- D..Electrical fuel pump
- E..Electrical oxidiser pump
- F..Combustion chamber and motor nozzle
- G..Stabilizing fins

Notes for Parents or Teachers

This program has been carefully designed to provide educational information while also providing a source of amusement. Your students learn while they think they are playing a computer game.

Extensive testing of this software has shown that children particularly enjoy the rocket race and are able to understand the basic physics involved. No attempt has been made to offer specific statistical information or to involve the student in complex mathematical calculations.

In a normal session start off by allowing the student to play with the rockets. Then after a few minutes point out that adjustments to the force factors make changes in the rocket flight characteristics. As the students understanding grows try and find out if you can make two or more rockets fly to the same height by balancing the forces differently. For example show that a rocket with medium thrust but a large drag factor will behave in a similar manner to a rocket with less thrust and a very small drag factor.

In all cases remember that experimentation is the key especially for very young students.


This software has actually been tested by users ranging from 4 to 14 years of age. In the case of the youngest it provides a useful tool to promote computer literacy and mouse coordination skills. Children of 7 to 10 enjoy the races and experiment extensively with the forces involved. and for the older student it provides an amusing yet informative diversion from run of the mill studies.

Pricing information

This program is PAYWARE. This means that you can try it out, show your friends and even give them a copy if they like it. This software is not however free. We hope that we have provided you with a valuable program and, after you decide to keep it, you should register it.

1..if you are a private user you will require the printed documentation which comes as a teaching pack. The fee is 85 French Francs (around \$15 U.S.).

2..if you represent a school or college then you will require the full teachers pack. This contains a licence for 15 copies of the software (enough for most classes) You will also receive in the teachers pack, photocopy worksheet masters, marking information, a short historical guide to rockets and rocketry, AND a FREE version of the program which has not 3 but 5 rockets in the race, This option costs 150 French Francs. (around \$25 U.S.)

Now that you have read this pricing information select the  button to return to the registration form.

Registration Information

For your convenience we have included several methods of registration. Simply select the one that suits you.

First read the **Pricing information** and then choose.

Ordering direct from Computer Innovation (Europe)

Ordering through PsL with your credit card

Ordering direct from Computer Innovation (Europe)

Fill in the form below and mail it to;

C.I Bureaux de Logiciel
35640 Eance
FRANCE

IMPORTANT enclose this information and especially be sure to include the serial number of your package. It is displayed on the signon banner

Name.....

House.....

Street.....

City.....

County/state.....

Country.....

ZIP/Postal code.....

Serial number.....

I am 18 years of age or over and wish to become a Computer Innovation PAYWARE salesperson.

Signature.....

I am under 18 years of age and have the consent of my parent or guardian to participate as a junior salesperson.

Signature of Parent or guardian.....

note.

If you are responsible for a bulletin board system contact C.I. directly by EMail at CompuServe user address 100142,3425

I require option (select one)

1 and I include an international money order for 85 French Francs.

2 and I include an international money order for 150 French Francs

NOTE international language versions are available. please write your language preference CLEARLY. If it is available then that version will be forwarded to you

The menu bar

The menu bar holds three selections Rocket, View and Help. To find out more select one of these.

Rocket

View

Help

Rocket

This menu holds three options

Design, will allow you to choose a rocket and then change the way that rocket flies.

First choose one of the rockets. You can use all of them if you are on your own or if you have company let a friend choose one.

After you choose one you can alter the way that the rocket works with this control panel. Move the slider controls to change the weight, drag and thrust of your rocket.

Fly gives you a countdown and then begins the rocket race.





Speed Allows you to change the rate at which the rockets move. Younger users may wish to slow the rockets down so that the telemetry data is easier to read.

Exit lets you leave the program

Some of the functions in the Rocket menu are also duplicated in the tool bar.



The Individual controls perform these tasks

-  Change the rocket flight parameters
-  Race the rockets
-  Change the rocket speed
-  View the version number of the software

View menu

Has two options.

Toolbar lets you turn the toolbar on or off. The toolbar has push buttons which perform the same functions as Design and Fly in the [Rocket menu](#)

Status bar lets you turn the status bar at the bottom of the screen on or off.

The help menu

About Rockets shows the current version and copyright notice.

Contents shows the contents page of this help file.

Help on help gives you information on how to work the Windows help system.

How payware works for you.

The shareware concept has always relied on you, the customer, endorsing the product and telling others how good and how useful the software is. This implies that you work for the software author as an important and highly valued salesperson.

We at Computer Innovation (Europe) acknowledge your value as the most important member of our sales team and intend to pay you for your time and effort selling this software. Therefore we are proud to introduce the PAYWARE system. Read on and learn how YOU can become a Computer Innovation salesperson.

The file which contains this software also contains a serial number. When you register this software you will receive, by return of post, a new disk containing the latest version of this software, a list of other products available in the payware range and **most important. Your own personal serial number.** When you distribute this software to others you will also distribute your personal serial number so that when they register the package we at Computer Innovation will have a record of your sales effort. Each quarter (approx. 90 days) the returns from your serial number will be assessed and **a payment of ten percent of net income from your serial number will be sent to you** by post in the form of an international money order drawable in your own currency. When that payment arrives you will also receive the PAYWARE salesperson bulletin which will give performance figures for the top software in the Computer Innovation PAYWARE range.

There is a CODE OF PRACTICE for Computer Innovation salespersons and you are required to adhere to this code.

Code of practice for Computer Innovation salespersons

To participate in the Computer Innovation PAYWARE scheme you must follow this code of practice. Anyone not complying with these simple rules WILL NOT be eligible to receive payments from Computer Innovation

- 1.. You must be at least 18 years of age OR have the consent of your parent or legal guardian.
- 2.. You must not alter any part of the software, software documentation, on-line help or copyright messages.
- 3.. You may not upload your personal copy of the software to a bulletin board or to an electronic mail system. Separate, special serial numbers are supplied for BBS use. (see note 4)
- 4.. If you are directly responsible for the software supplied on a BBS you may register one copy for distribution via that BBS. When you register you will be required to provide details of your BBS and your first registration fee will be waived.
- 5.. You may only distribute the files in their original form (usually a single compressed archive file). Do not distribute the files that have been decompressed and used on your computer. Remember Its your job to ensure that you do not pass on computer viruses to customers.

I have read the code of practice and agree to be bound by the terms and conditions therein. I want to find out how to register this software.

Rockets. Sales information.

Rockets is a simple educational program to demonstrate the principles of forces acting upon a rocket. Without resorting to complex calculation the program conveys the basic information that a student requires to understand how a rocket works.

This software is intended to supplement the educational resources of parents or schools who instruct students, particularly children, in basic physics.

If you have registered this software for your children you should introduce it to their school. The school may be able to integrate the package with the Physics, computer literacy or games library.

If you have registered this software for a school or college distribute your serial numbered copy to other schools or to parents interested in assisting in their children's education at home.

PAYWARE is a shareware marketing system from



Copyright © 1994

Ordering direct from PsL



The Public Software Library will be pleased to take your order using these credit cards.

MC, Visa, Amex or Discover.

[Select here for pricing information](#)

To order in the United States Phone 800-2424-PSL or 713-524-6394. Alternatively you may order by Fax on 713-524-6398 or by CIS Email at 71355,470.

You may also mail credit card orders to PsL at;

[Read and print the PsL mail order form](#)

PO. Box 35705
Houston
TX 77235-5705.

There is a small handling charge for these services. The Psl operator will be pleased to give you details.

The above numbers are for orders only. Computer Innovation customer service operates by Fax on +33 99 47 85 12 or by Email on Compuserve at user address 100142,3425. Sorry but voice support is unavailable due to international daytime differences.

Please register my copy of ROCKETS.EXE on behalf of Computer Innovation (Europe)

Name.....

Address.....

Street.....

City.....

ZIP.....

serial number.....

I am 18 years of age or over and wish to become a Computer Innovation PAYWARE salesperson.

Signature.....

I am under 18 years of age and have the consent of my parent or guardian to participate as a junior salesperson.

Signature of parent or guardian.....

I require the private user edition,

Please debit \$15 from my credit card / I enclose a check for \$15

I require the full schools / colleges edition

Please debit \$25 from my credit card / I enclose a check for \$25

I want to use MASTERCARD / VISA / AMEX / DISCOVER

(cross out that which does not apply)

Card number _____

Valid from ___ / ___ to ___ / ___

