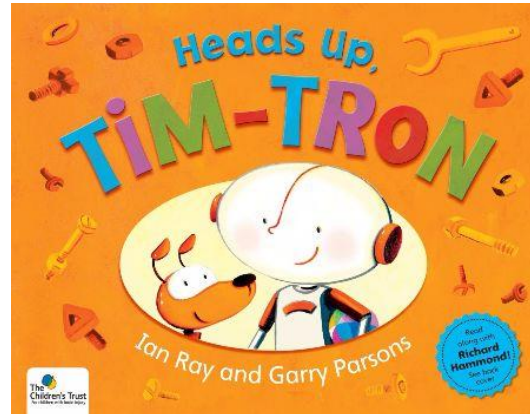


## Tim-Tron: a Guide for Grown-Ups



We created Tim-Tron as a way of explaining acquired brain injury to younger readers. These readers might be the child with an injury themselves, their siblings or their friends.

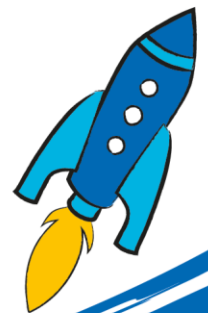
In this guide, we look at how our little robot's story overlaps with the experience of children with mild to moderate brain injury, and the clinical understanding of brain injury that forms the basis of Heads Up Tim-Tron.

In our experience, we've found that some children struggle with understanding their injury. Some may not want to accept that things are different for them now, and this may mean they refuse help, or push themselves a little too hard.

We hope to have created a story that introduces children to ABI in friendly way, one that offers some simple practical advice to help children take ownership of their condition, just as Tim-Tron does.

Perhaps most importantly, we hope you and your child enjoy Tim-Tron's story. We have been lucky in having the support of a first-class illustrator in Garry Parsons, and we're very proud of the results.

If you have any feedback at all, please email [thehub@thechildrenstrust.org.uk](mailto:thehub@thechildrenstrust.org.uk)



## Pages 10 - 11

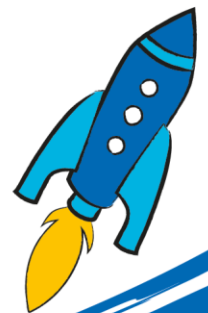


Tim-Tron bumps his head on the crossbar while playing football with his friends. If an impact of this kind causes a brain injury, it is known as a 'traumatic brain injury', or TBI.

It happens when an *outside* force of some kind (perhaps through an accident in a car) impacts the head and injures the brain. It tends to be a much greater impact than bumping into a goal post, but we wanted to create a scenario that wouldn't be too frightening for young children.

There are also 'non-traumatic' injuries. These are the result of something happening *inside* the body, such as an illness like meningitis or encephalitis.

It may sound strange to call something as stressful and difficult as brain injury 'non-traumatic', but the trauma part is really only describing an impact.



## Page 12

Tim-Tron has to stay at home to rest after the accident.



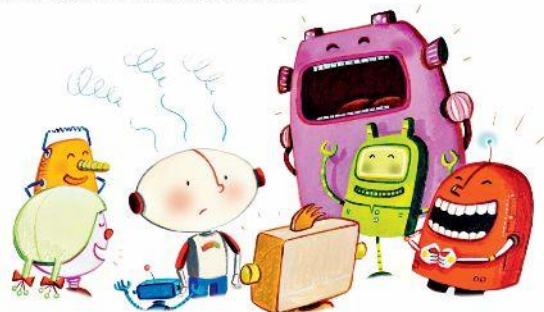
"It's **soooooo booooooring** here, and I miss my friends," he says. "Don't worry, you'll soon be back at school and complaining about it again," Mum promises.

We felt it was important that Tim-Tron wasn't immediately diagnosed with the injury to his circuit board.

Some brain injuries go unnoticed. It may be only when a child returns to more familiar surroundings (such as home or school) that differences in a child's behaviour are noticed, and a child's difficulties are recognised as symptoms of a brain injury.

## Page 13

Tim-Tron is back at school, but things have changed in the week he was away. His friends are still talking about football, but he gets **muddled** up with the conversation.



Other things are different, too...

Even a short time away from school can seem a lifetime to a child. Classroom friendships may have changed, and it can be upsetting for children to see how life has moved on and changed in their absence.

It's back at school that Tim-Tron realises he can't keep up with his friends' conversation. Difficulties with attention, processing information, and picking up subtle social clues can all contribute to a child with a brain injury feeling anxious about making conversation.

Other things have changed while Tim-Tron was away from school. Cyber-Simon has been made captain of the football team while (even more annoyingly!) his little sister Betty-Bot has won an academic award.

Some children returning to school after a brain injury may feel anxious or embarrassed about falling behind their peers.

There may be even more anxiety if a child feels they're falling behind a younger sibling, and this is often a difficult thing for parents to manage.

Tim-Tron seems to understand that things are different for him and that he may have difficulties.

But this isn't the case for every child. Some children may not realise that things are different for them now, and while this may seem a blessing, it may come with its own difficulties.

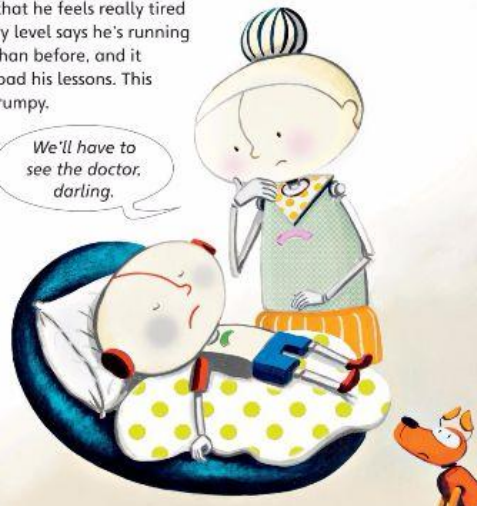
We've spoken above about how some children may push themselves too hard, or not see where they need help.

## Page 15

But the worst thing is that he feels really tired all the time. His battery level says he's running out of power quicker than before, and it takes longer to download his lessons. This makes Tim-Tron feel grumpy.

We'll have to see the doctor, darling.

Now Tim-Tron feels even more grumpy . . . he *hates* being **prodded** and **poked** at the doctor's!



Tiredness, or fatigue, is a major difficulty for many children with ABI. Tim-Tron is no exception, and his battery level becomes low soon after his injury.

Just as Tim-Tron's mood worsens as his battery level becomes depleted, many children become irritable because of their fatigue.



Experts talk about 'cognitive fatigue'. It's that feeling of having a tired, fuzzy head. We've all experienced that feeling of 'not being able to take anything in' when we're tired, and children may have more difficulty processing information when they are fatigued.

Sleep hygiene and keeping to a routine can help with fatigue. We talk more about this below.

## Page 18



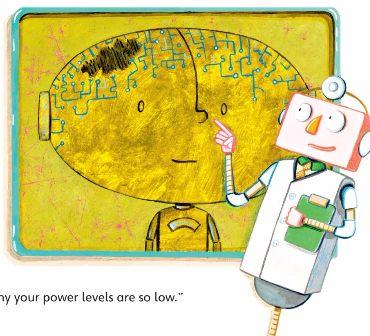
Your child may already have experienced an MRI scanner, which is a common way to explore what's happening in the brain.

These scanners can be noisy and dark, and they require a child to stay very still while scanning process takes place. All of which may make an MRI scan an unpleasant experience, as it is for Tim-Tron.

In some centres, parents are able to reassure their child while they're in the scanner through an intercom system.

## Page 19

"One of your circuit boards stopped working when you hit your head," the doctor says after the scan.

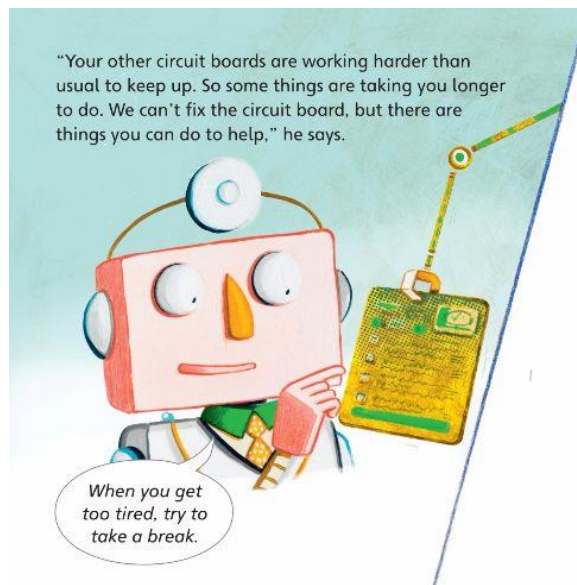


One of Tim-Tron's circuit boards stops working after the impact to his head. This is a very simplified version of the way in which the human brain works after an injury.

One of our clinicians at The Children’s Trust describes the brain as a cluster of tiny working circuits. When some of these circuits are injured, the remaining healthy circuits have to find ways of doing things around their injured counterparts.

In effect, the brain is creating diversions and finding new routes. The sheer effort of this process can make children feel ‘cognitively fatigued’. They may have difficulty processing information because their brain is at full capacity finding new ways of doing things.

## Page 20



Tim-Tron’s doctor explains that he can’t fix the circuit board, but there are other things he can do to help.

As you may already know, there is no simple cure or procedure for acquired brain injury.

The way each child responds to their injury is as unique as the child themselves, and so treatment usually takes the form of a programme of therapy that is designed specifically for that child.

In the book, Tim-Tron takes ownership of his condition by himself (with a little help). But in real life, brain injury is a “family affair”. There are many things families can do to help the recovery process along, which we will look at later on.

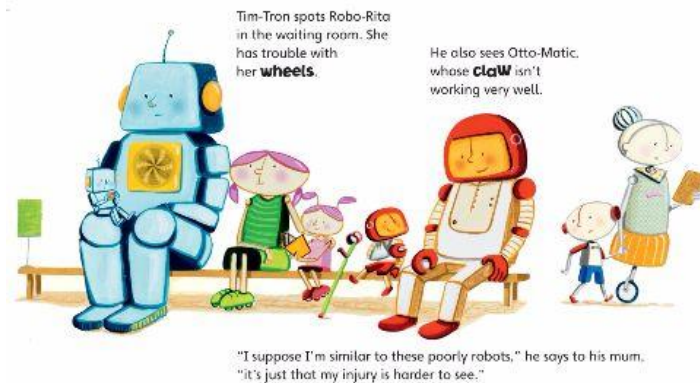
It is also very likely that a child will have lots more contact with therapists and clinical staff than Tim-Tron does in the book. But we wanted to avoid having too many characters, and we felt it was important to emphasise the things Tim-Tron and his family can do themselves at home.

The doctor advises Tim-Tron to take lots of breaks. This is extremely important if children are trying to deal with fatigue.

Their difficulties are often made worse if children push themselves too hard and overdo it, and so regular breaks may be necessary.

If your child is at school, this is exactly the kind of information a teacher would benefit from.

## Page 21



Tim-Tron realises his injury is similar to hurting any other part of the body – it's just more difficult to see.

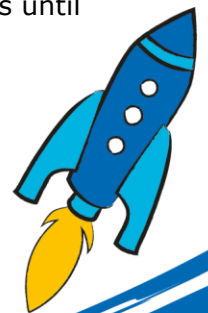
The 'hidden' nature of acquired brain injury can be a real cause of anxiety, both to children and to their parents.

To friends and family, some children may appear to have made a fantastic physical recovery. But this can mean the very serious impairments the child is struggling with aren't recognised.

Brain injury is sometimes called a 'hidden disability' for this reason, and parents sometimes become frustrated when their child's difficulties aren't realised.

There is another 'hidden' aspect of brain injury. It may be some time before the effects of an injury come to the surface.

For example, if a five-year-old injures their frontal lobe – the part of the brain responsible for judgment and problem-solving – it may not be realised that they have difficulties until they are older, when we begin to use that part of the brain more.



## Page 22

Back at home in Transistor Avenue,  
Tim-Tron works out a 'routine'.  
This means doing things at  
the same time each day.  
He powers **up** at the  
same time each  
morning . . .



. . . and powers **down** at the same time each night.



Tim-Tron works out a routine when he's back at home.

Children with ABI may benefit from a sense of routine because many have trouble thinking about things in a sequence. They may also have trouble with their memory and planning ahead – all things that help us organise ourselves.

And of course, these organisation skills become more important as children get older and they come to depend on them more.

But by establishing set routines, such as keeping regular mealtimes, a child has less organisational work to do. They can focus on one thing, and the hope is that activities become 'automatic' and simpler to carry out over time.

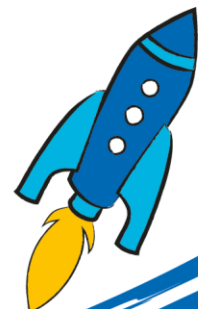
It is important that Tim-Tron 'powers up' and 'powers down' at the same time each day. Keeping to regular times to sleep and wake can be very helpful for children struggling with fatigue, as Tim-Tron does.

## Page 23

At school, Tim-Tron speaks to his teacher  
about everything the doctor said.  
Together, they give the class a special lesson  
all about Tim-Tron's circuit board.



This makes Tim-Tron feel much better.





Some children with acquired brain injury struggle with the 'sequencing' of tasks. It may be difficult for them to know where to start and in which order to do things, and this may have the effect of putting them off activities and tasks.

So it is often useful to support children in a task by setting it out as a series of steps, just as Tim-Tron does when he builds the robot cat.

For a task such as getting ready for school, it can be helpful to write a list, breaking down each individual step.

Limit the number of steps and tell your child how many steps there are. It can be useful to cross them off, like a checklist.

## Page 24

At school, Tim-Tron speaks to his teacher about everything the doctor said. Together, they give the class a special lesson all about Tim-Tron's circuit board.



This makes Tim-Tron feel much better.

Tim-Tron and his teacher give a lesson about Tim-Tron's circuit board back in school, and some families have found it useful to share information in this way.

A child's teacher will benefit a great deal from knowing the effects of your child's injury in order to answer some practical questions: 'will they need regular breaks?', 'how much homework should I set?', 'what do I need to do differently in the classroom?'.

How much other children in the class know is entirely up to the family. In some circumstances it may be helpful for other children to have some understanding of the changes their classmate has experienced.

This may form part of the preparation for a child returning to school, and may help avoid misunderstandings.

Fatigue, for example, is less likely to be interpreted as laziness by other children. Classmates may be more willing to help out if they understand a child's condition better.



## Page 25

The next day, the teacher says to Tim-Tron: "You're doing so well – would you like to go on the school trip to see the mountains of Mars?"



"Yes please!" says Tim-Tron, excitedly. But he feels a little nervous about going somewhere new.

Tim-Tron decides to make a list of things he needs to pack:

His ticket for the **Mars Express rocket ship,**



his **lunch,**



and his **camera.**



He feels less nervous after making his list.

Tim-Tron feels nervous before his trip to Mars. It's perfectly natural for children to feel this way before going somewhere new, but children with ABI may also feel anxious about a break from their daily routine.

Planning ahead and making a list of things to do may help children with this anxiety. Before his trip to Mars, Tim-Tron makes a list of things he needs to pack. We've already spoken about how breaking a task down into small steps can be helpful for children.

Children with acquired brain injury often have difficulties with their memory, and so list-making can also help them get organised.

It may help to go over your own lists of things to do with children in order to set an example of how you organise yourself.

## Pages 28 - 31

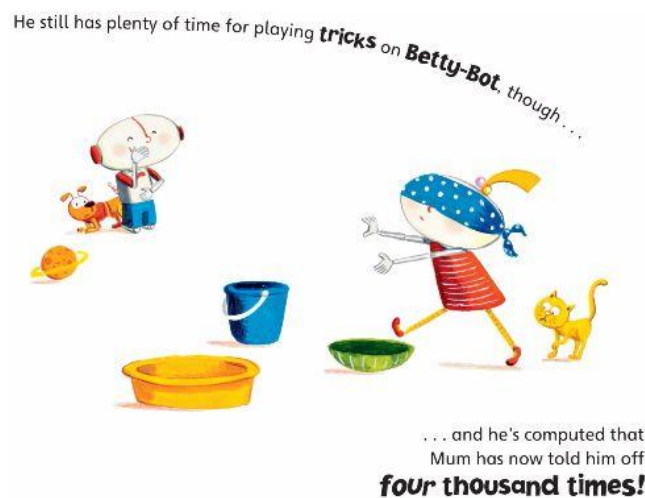


Our story ends with Tim-Tron's family being "not quite back to normal ... but close enough". We hope to have painted a picture of life with a brain injury that parents recognise.

It wouldn't have been right for Tim-Tron to make a full recovery and a perfect return to normality, when this isn't the case for many children.

Instead, Tim-Tron changes his expectations for grown-up life, and – inspired by his trip to Mars – decides to become an astronomer instead of a footballer. We felt it was important that Tim-Tron and his family were realistic about what he was able to achieve following his injury.

In a sense, Tim-Tron adjusts his expectations for his future in the same way lots of us do as we get older. His new-found sense of wonder about the solar system - combined with the difficulties he has experienced after his injury – mean he makes astronomy his new focus.



Tim-Tron is still a little badly behaved, and plays pranks on his sister. But some children with ABI have more troubling difficulties with behaviour, and this can be a source of great anxiety.

Perhaps the most important aspect of the ending is that Tim-Tron has the support of a loving family (pranks on Betty-Bot aside).

Brain injury is complex and fraught with difficulties, but all the experts are agreed that support from a caring family can make a genuine and positive difference to a child's recovery.

Please contact [thehub@thechildrenstrust.org.uk](mailto:thehub@thechildrenstrust.org.uk) if you would like to see the references for this material.

