

# Busy Bins for \$5 or less

**MATERIALS**

- Deck of Playing Cards
- Dominoes
- 10 playing Dice
- Checkers or Poker Chips
- Printable instructions available at:  
[www.STEAMengineOKC.org/freebies](http://www.STEAMengineOKC.org/freebies)  
[#busybins](https://twitter.com/busybins)

Fun  
&  
Games

**INSTRUCTIONS**

- Download the free printables and follow along to complete the following activities:
  - 8 building Challenge Cards
  - 38 Activities with a Deck of Cards
  - 18 Activities with Dominoes
  - 13 Activities with 10 playing dice
  - 7 Activities with Checkers/Poker Chips

\* The printable instructions include links to third party websites. The STEAM Engine has vetted these sites, but is not responsible for the content.







## Building Challenge Cards

In this freebie, we've put together 8 Building Challenge Cards that use the materials in the Busy Bin to test your child's knowledge about the physical properties of each of the materials. Complete the challenges individually, in a team, or against other players. Push yourself to go above and beyond the challenges listed on the cards. What can you build with the materials provided?

## Resource Round Up

We've also pulled together a Resource Round-up of other activities that can be done using the materials in the busy bin. Each of the activities is described in a third-party link.

(Note: The STEAM Engine is not responsible for the content found on third-party websites.)



**CHALLENGE #1:**

Using playing cards and dominoes, build a structure as tall as you are.

© 2020 The STEAM Engine.

**CHALLENGE #2:**

Using playing cards and dominoes, build a structure to support a book.

© 2020 The STEAM Engine.

**CHALLENGE #3:**

Using playing cards, build bridge spanning 12 inches. How wide can you go?

© 2020 The STEAM Engine.

**CHALLENGE #4:**

Using playing cards, determine whether squares or triangles are stronger.

© 2020 The STEAM Engine.

**CHALLENGE #5:**

Setting dominoes up on end, create a track that is 2x as long as you are.

© 2020 The STEAM Engine.

**CHALLENGE #6:**

Using the materials, create a Rube Goldberg machine to knock over an object.

© 2020 The STEAM Engine.

**CHALLENGE #7:**

How many checker pieces/poker chips can you stack in 30 seconds?

© 2020 The STEAM Engine.

**CHALLENGE #8:**

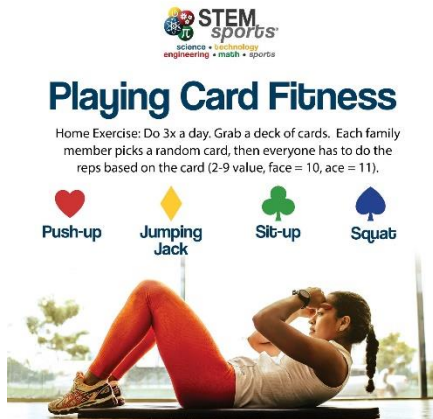
How tall can you stack checker pieces/poker chips before they fall?

© 2020 The STEAM Engine.



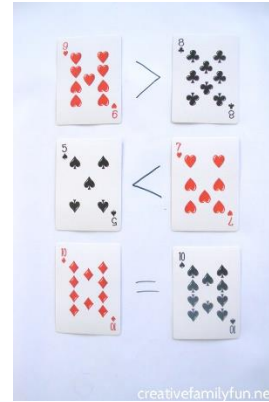
# STEM ACTIVITIES WITH A DECK OF CARDS

## Playing Card Fitness



From: <https://stemsports.com/stem-ecosystems-webinar-calculating-calories-and-heart-rate/>

## Greater Than or Less Than



From: <https://creativefamilyfun.net/exploring-greater-less-playing-cards/>

## 20 things to do with a Deck of Cards



From: <https://www.kcedventures.com/blog/20-things-to-do-with-a-deck-of-cards>

## 16 Card Games



From: <https://www.weareteachers.com/math-card-games/>



# STEM ACTIVITIES WITH PLAYING DICE

## 12 Dice Games
















12 DICE GAMES TEACHERS  
and students will Love



From:

<https://www.weareteachers.com/dice-games/>

## Yahtzee (home edition)

 None	Aces each  = 1 pt.	
	Twos each  = 2 pts.	
	Threes each  = 3 pts.	
	Fours each  = 4 pts.	
	Fives each  = 5 pts.	
	Sixes each  = 6 pts.	
Total TOP score		
3 of a kind ex.  ex.	Total of 3 dice	
4 of a kind ex.  ex.	Total of 4 dice	
Full House (2 of a kind + 3 of a kind) ex.  ex.	25 points	
Small Straight (4 in a row) ex.  ex.	30 points	
Large Straight (4 in a row) ex.  ex.	40 points	
Yahtzee (5 of a kind) ex.  ex.	50 points	
Bonus Yahtzee	100 points	
CHANCE (cooper! Won't work for anything else)	Total of all 5 dice	
Total BOTTOM score		

From:

<https://www.teacherspayteachers.com/Product/Yahtzee-Scoreboard-364970>



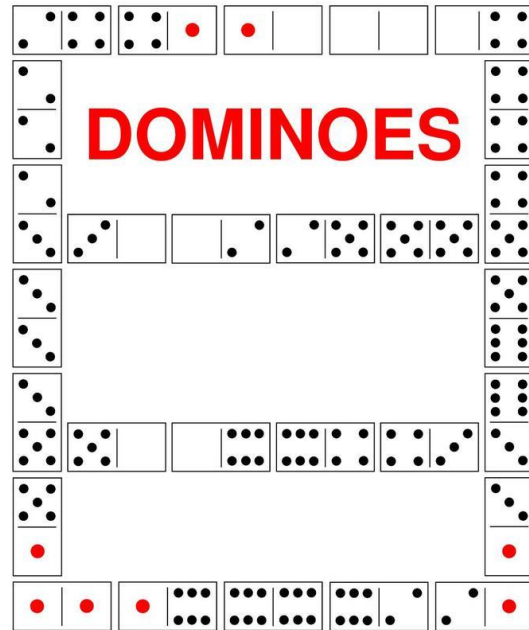
# STEM ACTIVITIES WITH DOMINOES

## 8 Domino STEM Challenges



From: <https://frugalfun4boys.com/domino-challenge-cards/>

## 10 Domino Math Activities



From: <https://www.stem.org.uk/elibrary/resource/35317>





# ACTIVITIES WITH CHECKERS/POKER CHIPS

## Pre-Coding with Checkers



checkers math  
& PRE-CODING

SUGARAUNTS.COM

From:

<https://www.theotttoolbox.com/checkers-math-pre-coding-without-app>

## 6 Poker Chip Games



From:

<http://www.preschoolexpress.com/game-station14/poker-chip-games.shtml>

