

# Reindeer and Sleigh Lego™ Design



## ENGL214 - Intro to Technical Communication

### Documenting a Process

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Group Members: \*\*\*\*\* \*\*\*\*\*  
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## Introduction

This instruction guide is for people ages 10+ who are interested in building the Reindeer and Sleigh design from Lego™ in the Lego™ Digital Designer Software or with physical bricks! A concise guide to how to build this set will be provided for both newcomers and builders with past experience. This manual will address broad questions about the general building process for new builders, as well as specific piece instructions for experienced builders. If you're a new builder, this manual will help you to build your design in about **1 hour and 30 minutes**. If you're an experienced builder, this manual will help you to build your design in about **1 hour**.

As the builder, you have the freedom to add or remove pieces to the model as you create to make it your own! Lego™ encourages your exploration of your imagination. Should the Reindeer be a different color? Or would you want to add snow flakes on the Sleigh? Or maybe you want to add your own, original Santa Claus. The options are endless with the Lego™ Digital Designer Software or using physical bricks!

This set includes 214 pieces in total, which are individually labelled and assigned to either the Sleigh (S) or Reindeer (R). Specifics on piece labeling can be found on the following page. For additional questions, contact the Lego™ Digital Designer Software Help Center online at <http://ldd.lego.com/en-us/support>, or seek assistance at your local Lego™ store.

























Happy building!

## Complete List of Pieces with Pictures

Below, builders can find a complete list of all of the pieces that have been included with your kit to build the Sleigh and Reindeer Lego™ Design, whether in physical bricks or digitally through Lego™ Digital Designer Software. The following lists are split into two sections: Reindeer and Sleigh. Please see the Table of Contents on **Page 2** for details on specific pages for separate lists.










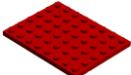














**TIP: We suggest printing out the Lists of Pieces to have side-by-side with your instructions to make your building experience easier.**

## Complete List of Reindeer Pieces

R1 4x 	R2 4x 	R3 2x 	R4 2x 	R5 4x 	R6 20x 
R7 8x 	R8 16x 	R9 4x 	R10 2x 	R11 4x 	R12 2x 
R13 12x 	R14 2x 	R15 2x 	R16 2x 	R17 4x 	R18 12x 
R19 2x 	R20 4x 	R21 2x 	R22 8x 	R23 4x 	R24 2x 
R25 10x	R26 2x				

					
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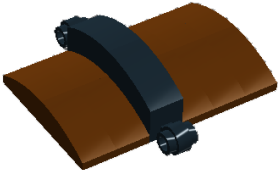
## Complete List of Sleigh Pieces



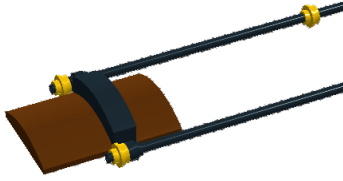
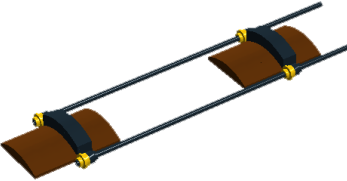





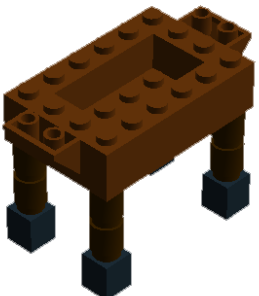
<b>S1</b> 2x 	<b>S2</b> 4x 	<b>S3</b> 1x 	<b>S4</b> 2x 	<b>S5</b> 2x 	<b>S6</b> 2x 
<b>S7</b> 4x 	<b>S8</b> 2x 	<b>S9</b> 2x 	<b>S10</b> 1x 	<b>S11</b> 2x 	<b>S12</b> 4x 
<b>S13</b> 1x 	<b>S14</b> 2x 	<b>S15</b> 2x 	<b>S16</b> 2x 	<b>S17</b> 2x 	<b>S18</b> 3x 
<b>S19</b> 5x 	<b>S20</b> 4x 	<b>S21</b> 6x 	<b>S22</b> 5x 	<b>S23</b> 1x 	<b>S24</b> 2x 





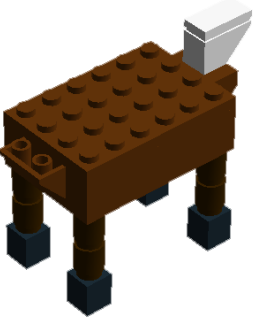



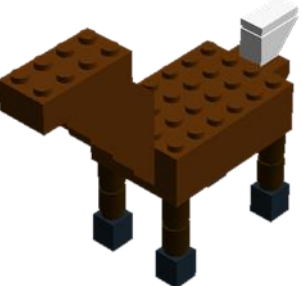


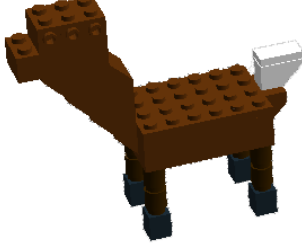
## Instructions for Building

Below, builders can find a comprehensive step-by-step guide to building the Sleigh and Reindeer design from Lego™. The following instructions are split into two sections: Reindeer and Sleigh. Please see the Table of Contents on **Page 2** for details on specific pages for separate instructions.


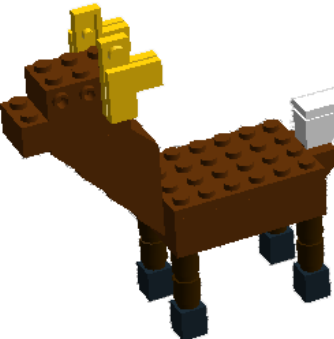

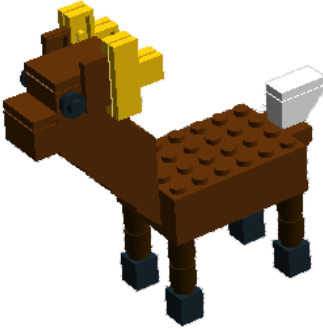
### Instructions for the Reindeer

Steps	Pieces	Illustration
<ol style="list-style-type: none"> <li>1. Take <b>10x</b> of <b>R6</b> and attach them to <b>R10</b> so that there are five on each side and a gap on <b>R10</b>.</li> <li>2. In the gap on <b>R10</b>, place <b>1x</b> of <b>R4</b> so that the middle two knobs fit over the knobs of <b>R10</b>.</li> </ol>	 <p><b>R4 1x</b></p>  <p><b>R6 10x</b></p>  <p><b>R10 1x</b></p>	
<ol style="list-style-type: none"> <li>3. Use <b>2x</b> of <b>R2</b> and attach them to the bottom of <b>R4</b> on either side of <b>R10</b>.</li> <li>4. Attach <b>1x</b> of <b>R3</b> to the top of <b>R4</b> so that it covers the middle two knobs of <b>R4</b>.</li> <li>5. Use <b>2x</b> of <b>R5</b> and connect the lower portion of each piece to <b>R4</b> and the upper portion of each piece to <b>R3</b>.</li> </ol>	 <p><b>R2 2x</b></p>  <p><b>R3 1x</b></p>  <p><b>R5 2x</b></p>	

<p>6. Use <b>2x</b> of <b>R26</b> and <b>2x</b> of <b>R1</b>. Slide one piece of <b>R1</b> onto one end of each piece <b>R26</b>.</p> <p>7. Slide <b>1x</b> of <b>R26</b> through the hole of each <b>R2</b> piece that is connected to <b>R4</b>, until each <b>R2</b> piece touches the <b>R1</b> pieces already on <b>R26</b>.</p> <p>8. Slide <b>1x</b> of the remaining <b>R1</b> pieces onto each <b>R26</b> piece, leaving a large space between these <b>R1</b> pieces and the <b>R2</b> pieces that are already on the <b>R26</b> pieces.</p> <p><b>TIP: Instead of yellow R1 pieces, you can make them white like snowflakes!</b></p>	 <p><b>R1 2x</b></p>  <p><b>R26 2x</b></p>	
<p>9. Repeat <b>Steps 1-5</b> with the remaining <b>R10</b>, <b>R6</b>, <b>R4</b>, <b>R2</b>, and <b>R3</b> to create the back of the second reindeer.</p> <p>10. Slide <b>1x</b> of newly connected <b>R2</b> piece onto each <b>R26</b> piece on the outside of the <b>R1</b> pieces from <b>Step 8</b>.</p>		
<p>11. Use <b>4x</b> of <b>R7</b> and <b>8x</b> of <b>R8</b>. Stack <b>2x</b> of <b>R8</b> on top of each <b>R7</b> piece to create the reindeer legs.</p> <p>12. Attach <b>1x</b> of <b>R9</b> to the top pieces of <b>R8</b>. The <b>R8</b> pieces should be connected to the corners of the <b>R9</b> piece so that it looks like a table.</p> <p>13. Use <b>2x</b> of <b>R25</b> and attach them to <b>R9</b>. The <b>R25</b> pieces should cover the two middle pegs on the short sides of <b>R9</b> and be positioned so that the slanted end is on bottom and faces outward.</p> <p>14. Place <b>2x</b> of <b>R11</b> pieces on the <b>R9</b> piece. They should be positioned on either side of the <b>R25</b> pieces so that <b>R11</b> covers the entire length of <b>R9</b> on each side.</p> <p><b>TIP: You can make your Reindeer spotted by replacing some of the R25 brown pieces with white or black</b></p>	 <p><b>R7 4x</b></p>  <p><b>R8 8x</b></p>  <p><b>R9 1x</b></p>  <p><b>R25 2x</b></p>  <p><b>R11 2x</b></p>	

pieces!		
<p>15. Use <b>1x</b> of <b>R9</b> piece and place it on top of the <b>R25</b> and <b>R11</b> pieces. The lines of this <b>R9</b> piece should line up with the <b>R9</b> piece from <b>Step 12</b>.</p> <p>16. Attach <b>1x</b> of <b>R12</b> piece to <b>one</b> of the <b>R25</b> pieces from <b>Step 13</b>.</p> <p>17. Attach <b>1x</b> of <b>R16</b> piece to the <b>R12</b> piece so that angled side faces downward and the pointed edge is directed outward.</p> <p>18. Place <b>1x</b> of <b>R24</b> piece on top of the <b>R16</b> piece so the entire top side of <b>R16</b> is covered by <b>R24</b>.</p>	 <p><b>R9 1x</b></p>  <p><b>R12 1x</b></p>  <p><b>R16 1x</b></p>  <p><b>R24 1x</b></p>	
<p>19. Attach <b>1x</b> of <b>R25</b> piece to the other <b>R25</b> piece that is partially exposed so that the angled side faces down and outward.</p> <p>20. Place <b>1x</b> of <b>R21</b> piece on the newest <b>R25</b> addition, and place <b>x1</b> of <b>R25</b> on the exposed section of the last <b>R25</b> piece mentioned.</p> <p>21. Attach <b>1x</b> of <b>R19</b> piece to the top of the <b>R21</b> and the <b>R25</b> that were added in <b>Step 20</b>.</p> <p>22. Attach <b>1x</b> of <b>R25</b> to the top of the partially exposed <b>R25</b> piece added in <b>Step 20</b>. The angled side should face down and outward.</p>	 <p><b>R19 1x</b></p>  <p><b>R21 1x</b></p>  <p><b>R25 3x</b></p>	
<p>23. Place <b>1x</b> of <b>R14</b> piece on top of the <b>R19</b> and the <b>R25</b> from <b>Steps 21 and 22</b>, respectively. The excess of <b>R14</b> should be placed on the outside and not toward the body of the reindeer.</p> <p>24. Use <b>6x</b> of <b>R13</b> pieces. Attach them to the top of the <b>R14</b> piece in two rows of three with the side knobs facing outward to either side of <b>R14</b>.</p>	 <p><b>R13 6x</b></p>  <p><b>R14 1x</b></p>	



<p>25. Use <b>2x</b> of <b>R17</b> pieces. Attach them to the <b>R13</b> pieces closest to the body of the reindeer so that they are vertical, with the lowest peg connected to the <b>R13</b> pieces.</p> <p>26. Attach <b>1x</b> of <b>R18</b> piece to each of the <b>R17</b> pieces from <b>Step 25</b>. They should be placed at the bottom of the <b>R17</b> pieces, on the other side from the <b>R14</b> pieces from <b>Step 23</b>.</p> <p>27. Connect <b>1x</b> of <b>R18</b> piece to <b>1x</b> of <b>R23</b> piece to each <b>R17</b> piece. One peg of the <b>R23</b> piece should connect to the middle of each <b>R17</b> piece, and the other peg should attach to an <b>R18</b> piece that is placed in the direction of the reindeer's body on either side.</p> <p>28. Repeat <b>Steps 25 – 27</b> to make the other antler.</p> <p><b>TIP: You can make the antlers longer by attaching more R17, R18, and R23 pieces together!</b></p>	 <p><b>R17 2x</b></p> <p><b>R18 1x</b></p> <p><b>R23 1x</b></p>	
<p>29. Place <b>1x</b> of <b>R18</b> piece at the top of each <b>R17</b> piece from <b>Step 25</b>.</p> <p><b>TIP: You can exchange one of the R22 pieces for a red one and make Rudolph the Red-Nosed Reindeer!</b></p> <p>30. Use <b>4x</b> of <b>R22</b> pieces. Attach <b>1x</b> of <b>R22</b> to the tops of the <b>R13</b> pieces that are in between the two <b>R17</b> pieces. Attach <b>1x</b> of <b>R22</b> to each side of the <b>R13</b> pieces immediately in front of those connected to the <b>R17</b> pieces. Attach the fourth <b>R22</b> to the two pegs exposed on the <b>R14</b> piece from <b>Step 23</b>.</p> <p>31. Attach <b>1x</b> of <b>R15</b> piece to the four remaining pegs on top of the reindeer's head, belonging to four of the <b>R13</b> pieces from <b>Step 24</b>.</p> <p>32. Attach <b>1x</b> of <b>R20</b> piece to each of the two remaining knobs on the <b>R13</b> pieces from <b>Step 24</b>. These will be the reindeer's eyes.</p>	 <p><b>R15 1x</b></p> <p><b>R18 1x</b></p> <p><b>R22 4x</b></p> <p><b>R20 2x</b></p>	

33. Attach the body of the reindeer to the curved back that was created in **Steps 1-5** and attached to the harness in **Step 7**.








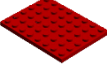

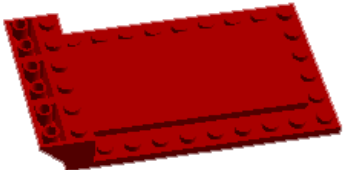











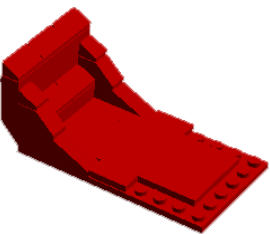


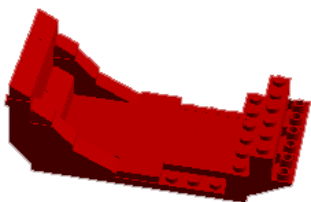
34. Repeat **Steps 1-33** with the remaining reindeer pieces to create the second reindeer.





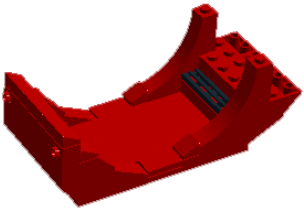

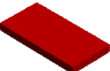





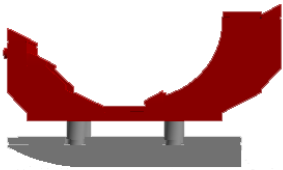




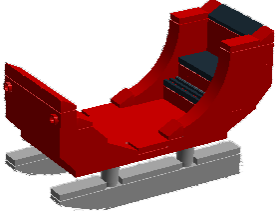
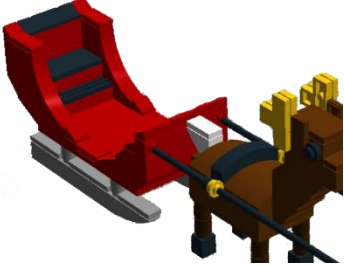
**TIP: You can make even more reindeer by simply repeating Steps 1-33!**

## Instructions for the Sleigh

Steps	Pieces	Illustrations
<ol style="list-style-type: none"> <li>1. Begin with <b>1x</b> of <b>S9</b>. Take <b>1x</b> of <b>S7</b> and place it on the top of the pointed end of <b>S9</b>.</li> <li>2. Take <b>1x</b> of <b>S2</b> and place it next to <b>S7</b>.</li> <li>3. Take <b>1x</b> of <b>S8</b> and place it on top of <b>S9</b>, next to <b>S2</b>.</li> <li>4. Take <b>1x</b> of <b>S2</b> and place it on top of <b>S9</b>, directly next to <b>S8</b>.</li> <li>5. Take <b>1x</b> of <b>S7</b> and place it on the remaining space above <b>S9</b>.</li> <li>6. Repeat <b>Steps 1-5</b> to make a replica of the other sleigh runner.</li> </ol>	 <p><b>S2 2x</b></p>  <p><b>S7 2x</b></p>  <p><b>S8 1x</b></p>  <p><b>S9 1x</b></p>	
<ol style="list-style-type: none"> <li>7. Take <b>4x</b> of <b>S6</b>. Place 3 of them directly in the middle of <b>S10</b>. Take the remaining piece of <b>S6</b> and place half of it on <b>S10</b>.</li> <li>8. Take <b>1x</b> of <b>S3</b> and place it underneath <b>S6</b>, so it is in line with <b>S10</b>.</li> <li>9. Take <b>3x</b> of <b>S21</b> and attach each one on top of <b>S10</b>.</li> </ol> <p><b>TIP: You can change the color of the Sleigh by using different colored Legos!</b></p>	 <p><b>S3 1x</b></p>  <p><b>S6 4x</b></p>  <p><b>S10 1x</b></p>  <p><b>S21 3x</b></p>	
<ol style="list-style-type: none"> <li>10. Take <b>1x</b> of <b>S4</b> and attach it to the pointed end of <b>S21</b>.</li> <li>11. Take <b>2x</b> of <b>S15</b> and place them on top of <b>S10</b>, directly in front of <b>3x</b> of <b>S21</b>.</li> <li>12. Take <b>2x</b> of <b>S20</b> and place them on top of <b>S10</b>,</li> </ol>	 <p><b>S4 1x</b></p>	

<p>directly in front of <b>S15</b>.</p>	 <b>S15 2x</b>  <b>S20 2x</b>	
<p>13. Take <b>2x</b> of <b>S16</b> and place them directly in front of <b>S15</b>.</p> <p>14. Take <b>2x</b> of <b>S16</b>. Place one on top of <b>S21</b>, behind <b>S15</b>. Place the other <b>S16</b> on the opposite end of <b>S21</b>, behind the other <b>S15</b>.</p> <p>15. Take <b>2x</b> of <b>S23</b> and place them on top of the remaining space of the <b>S21</b> pieces, between the two <b>S15</b> pieces.</p> <p>16. Take <b>2x</b> of <b>S12</b> and place each on the top of the <b>S16</b> pieces.</p> <p>17. Take <b>1x</b> of <b>S11</b> and place it directly on top and on the center of <b>S5</b> so that a singular space remains empty on either side of <b>S11</b>.</p> <p>18. Take <b>2x</b> of <b>S6</b> and fill the remaining singular space on either side of <b>S11</b>.</p> <p>19. Take <b>3x</b> of <b>S22</b> and place them along the tops of <b>S6</b> and <b>S11</b>.</p>	 <b>S6 2x</b>  <b>S11 1x</b>  <b>S12 2x</b>  <b>S16 4x</b>  <b>S22 3x</b>	
<p>20. Place <b>3x</b> of <b>S18</b> and place them along the top of <b>S3</b>.</p> <p>21. Place <b>3x</b> of <b>S19</b> along the middle of <b>S18</b>.</p>	 <b>S18 3x</b>  <b>S19 3x</b>	

<p>22. Place <b>3x</b> of <b>S21</b> along the top of the slanted end of <b>S18</b>.</p> <p>23. Place <b>2x</b> of <b>S14</b> on the remaining visible parts of <b>S10</b> and <b>S3</b>.</p> <p>24. Take <b>2x</b> of <b>S12</b> and place each of them on <b>S14</b> so that they are next to <b>S20</b>.</p> <p>25. Take <b>2x</b> of <b>S17</b> and place them between <b>S14</b> on the remaining spaces of <b>S18</b>.</p>	 <p><b>S12 2x</b></p>  <p><b>S14 2x</b></p>  <p><b>S17 2x</b></p>  <p><b>S21 3x</b></p>	
<p>26. Take <b>2x</b> of <b>S19</b> and place them on the outside edges of <b>S21</b>, directly behind <b>S14</b>.</p> <p>27. Place <b>S11</b> along the back of <b>S21</b>.</p> <p>28. Place <b>S13</b> in the remaining space in front of <b>S11</b>.</p> <p><b>TIP: We suggest adding an animal companion to your Sleigh! In your Lego™ Digital Designer you can search for any animal to add.</b></p>	 <p><b>S11 1x</b></p>  <p><b>S13 1x</b></p>  <p><b>S19 2x</b></p>	
<p>29. Place <b>S1</b> on top of <b>S19</b>, directly behind <b>S14</b>, so that there is no space between those two pieces.</p> <p>30. Take <b>2x</b> of <b>S20</b> and place them so they are covering the top of both <b>S14</b> and <b>S1</b>.</p> <p>31. Place <b>S5</b> on the remaining parts of <b>S19</b>.</p> <p>32. Place <b>S23</b> directly in the center of <b>S5</b>.</p> <p>33. Take <b>2x</b> of <b>S24</b>. Place one on either side of <b>S23</b>.</p> <p>34. Take <b>2x</b> of <b>S12</b>. Place one on either side of <b>S12</b>.</p> <p>35. Attach the <b>sleigh runners</b> to the bottom of the</p>	 <p><b>S1 1x</b></p>  <p><b>S5 2x</b></p>  <p><b>S12 2x</b></p>	

<p>sleigh as pictured.</p>	 <p>S20 2x</p>  <p>S23 1x</p>  <p>S24 2x</p>	
<p>36. To connect your Reindeer and Sleigh, simply connect the <b>2x</b> of <b>R26</b> to the knobs of the <b>2x</b> of <b>S6</b>.</p>  <p><b>TIP: You can create your own Santa Claus to sit in your newly created Sleigh! You can use your imagination to build Santa, or find a Santa design you like on Lego™ Digital Designer Software here: <a href="http://idd.lego.com/en-us/">http://idd.lego.com/en-us/</a></b></p>		